

Undergraduate Catalog

2016-2017



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Intern at a Fortune 500 company
Get your work skills honed in a top science
Do ground-breaking research
Study the big Bang at a national
Get into the best law schools
Study companies in a
Be a sideline reporter
Ride bows with a U.S. Olympic
Watch leading research
Spend a year working for a social ju
Connect with 48,000 alumni across the

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UNDERGRADUATE CATALOG

Visitors are cordially welcome at Canisius College. The administrative offices are open Monday through Friday, 8:30 a.m. until 5:00 p.m. during the academic year and 8:30 a.m. until 4:30 p.m. during the summer (except on legal or college-wide holidays). Members of the college staff are available for interviews at other times by appointments arranged in advance. The main switchboard number of the college is 716-883-7000.

Copy for this catalog was prepared as of August 1, 2016. Information, particularly timing of course offerings, is subject to change at the discretion of the college. Please consult the course-listings schedule published by the Student Records and Financial Services Center for a complete and up-to-date list of our course offerings for each semester and/or session. The college retains the right to correct errors within the copy of this catalog.

Students must complete the curriculum described in the catalog from the academic year that they matriculate at Canisius. If the curriculum changes, please consult with the department chair or program director to determine if students may choose to follow the newer curriculum. Catalogs from previous years are available on the Canisius website (<https://www.canisius.edu/academics/academic-catalog>).

Additional information about the college and our programs and opportunities are available on the Canisius website (<https://www.canisius.edu/academics/academic-catalog>).

Publication of The Office of Academic Affairs

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Sara R. Morris, PhD, Associate Vice President for Academic Affairs

ACADEMIC CALENDAR

ACADEMIC YEAR 2016-2017 SUMMER 2016

June 2016

Date	Day	Event
3	Friday	Graduate Business make-up session for Memorial Day.
7	Tuesday	Second Student Health warning for students not in compliance in the first summer session.
14	Tuesday	Third Student Health warning for students not in compliance in the first summer session.
21	Tuesday	Student Health registration holds placed for students not in compliance in the first summer session.
23	Thursday	First 5-week undergraduate, Graduate Education and Communication and Leadership sessions end. Online grading available in myCanisius.
27	Monday	Second Summer sessions begin. 5 week Undergraduate, Graduate Education, Communication and Leadership sessions begin.
29	Wednesday	First 5 week session final grades due.
30	Thursday	First 6 week Graduate Business and Professional Studies sessions end.

July 2016

Date	Day	Event
4	Monday	Fourth of July holiday – No classes.
5	Tuesday	Second 6 week Graduate Business and Professional Studies sessions begin. First Student Health warning for students not in compliance in the second summer session.
6	Wednesday	First Graduate Business and Professional Studies session grades due.
8	Friday	Graduate Business make-up session for Fourth of July holiday.
12	Tuesday	Second Student Health warning for students not in compliance in the second summer session.
19	Tuesday	Third Student Health warning for students not in compliance in the second summer session.
26	Tuesday	Student Health registration holds placed for students not in compliance in the second summer session.
28	Thursday	Second 5 week Undergraduate, Graduate Education, Communication and Leadership sessions end. Online grading available in myCanisius.

August 2016

Date	Day	Event
3	Wednesday	Second 5 week session final grades due.
11	Thursday	Second Graduate Business and Professional Studies sessions end
17	Wednesday	Second Graduate Business and Professional Studies session grades due.
22	Monday	Last day to submit final grades for any summer course Online grading turned off

FALL 2016

August 2016

Date	Day	Event
22	Monday	New faculty orientation
24	Wednesday	Adjunct orientation
29	Monday	Classes begin in all divisions First day to apply for a course through the pass/fail program
31	Wednesday	Counselor Education session one begins

September 2016

Date	Day	Event
2	Friday	Last day to apply for a course through the pass/fail program
3	Saturday	Last day to drop/add a course (all divisions)
5	Monday	Labor Day – No classes
6	Tuesday	Withdrawal from courses begins (all divisions) 90% withdrawal refund (full-term classes) Begin 50% withdrawal refund for Professional Studies and Online Technologies/TESOL session one Begin 30% withdrawal refund for Counselor Education session one First student health warnings for students not in compliance Deadline for submitting Core Curriculum proposals for inclusion in spring 2017 schedule
13	Tuesday	Begin 50% withdrawal refund (full-term classes) Begin 20% withdrawal refund for Professional Studies and Online Technologies/TESOL session one Second student health warnings for students not in compliance
14	Wednesday	Begin 0% withdrawal refund for Counselor Education session one
16	Friday	Spring 2017 schedule and advisement guide information sent to department chairs and program directors

20	Tuesday	50% withdrawal refund (full-term classes) Begin 0% withdrawal refund for Professional Studies and Online Technologies/TESOL session one Third student health warnings for students not in compliance
26	Monday	Spring 2017 schedule due to associate deans
27	Tuesday	Begin 25% withdrawal refund (full-term classes) Student health registration cancellations for students not in compliance
28	Wednesday	Student Progress Report submission by faculty begins Counselor Education session one ends Spring 2017 advisement guide submissions due to student records & financial services
30	Friday	Fall 2016 final exam schedule available in myCanisius

October 2016

Date	Day	Event
4	Tuesday	25% Withdrawal Refund
5	Wednesday	Student Progress Report submission by faculty ends Counselor Education session one grades due Counselor Education session two begins
6	Thursday	Email to designated students regarding Student Progress Reports
7	Friday	Student Progress Report meetings with advisors begin
10	Monday	Fall Holiday – no classes (except Graduate Business - those classes are in session)
11	Tuesday	Fall Holiday – No classes 25% withdrawal refund (full-term classes)
12	Wednesday	Begin 30% withdrawal refund for Counselor Education session two
14	Friday	Spring 2017 schedule and advisement guide available in myCanisius
18	Tuesday	25% withdrawal refund (full-term classes)
20	Thursday	Begin no withdrawal refund for Counselor Education session two
21	Friday	Student Progress Report meetings with advisors end
22	Saturday	Professional Studies and Online Technologies/TESOL session one ends
24	Monday	Professional Studies and Online Technologies/TESOL session two begins
25	Tuesday	Begin no withdrawal refund (full-term classes)
26	Wednesday	Professional Studies and Online Technologies/TESOL session one grades due

29	Saturday	Spring 2017 undergraduate registration begins for students with 84.0 or more completed credit hours Drop/Add ends for Professional Studies session two
31	Monday	Spring 2017 graduate registration begins

November 2016

Date	Day	Event
1	Tuesday	First Student Health warnings for students not in compliance in Professional Studies session two
2	Wednesday	Faculty Deficiency Report submission begins Counselor Education session two ends
5	Saturday	Spring 2017 undergraduate registration begins for students with 54.0 – 83.0 earned credit hours
7	Monday	Begin 50% withdrawal refund for Professional Studies and Online Technologies/TESOL session two
8	Tuesday	Second Student Health warnings for students not in compliance in Professional Studies session two
9	Wednesday	Faculty Deficiency Report submission ends Counselor Education session two grades due Counselor Education session three begins
10	Thursday	Email to designated students regarding Deficiency Reports
11	Friday	Veterans' Day – classes in session.
12	Saturday	Spring 2017 undergraduate registration begins for students with 24.0 – 53.0 earned credit hours
14	Monday	Begin 20% withdrawal refund for Professional Studies and Online Technologies/TESOL session two
15	Tuesday	Third Student Health warnings for students not in compliance in Professional Studies session two
16	Wednesday	Begin 30% withdrawal refund for Counselor Education session three
18	Friday	Last day to withdraw from a course Summer 2017 schedule information to department chairs and program directors
19	Saturday	Spring 2017 undergraduate registration begins for students with 0 – 23 earned credit hours
21	Monday	Begin no withdrawal refund for Professional Studies and Online Technologies/TESOL session two
22	Tuesday	Student Health registration cancellations for students not in compliance in Professional Studies session two
23	Wednesday	Thanksgiving Recess begins - no classes

24	Thursday	Thanksgiving Day - no classes Begin no withdrawal refund for Counselor Education session three
25	Friday	Thanksgiving Recess - no classes
26	Saturday	Thanksgiving Recess - no classes
28	Monday	Classes resume

December 2016

Date	Day	Event
5	Monday	First day to withdraw from pass/fail program
7	Wednesday	Counselor Education session three ends
9	Friday	Undergraduate classes end Last day to withdraw from pass/fail program
10	Saturday	Graduate classes end
12	Monday	Final Exams begin Final grade entry available in myCanisius
16	Friday	Undergraduate Final Exams end
17	Saturday	Graduate Final Exams end Professional Studies and Online Technologies/TESOL session two ends
21	Wednesday	Final grades due by 9:00 am Final grade entry in myCanisius off at 5:00 pm
22	Thursday	Final grades available in myCanisius
23	Friday	College holiday shutdown begins

SPRING 2017

January 2017

Date	Day	Event
3	Tuesday	College reopens after holiday shutdown
16	Monday	Martin Luther King Day – no classes
17	Tuesday	Classes begin in all divisions First day to apply for a course through the pass/fail program
18	Wednesday	Counselor Education session one begins
23	Monday	Last day to drop or add a class (all divisions) Last day to apply for a course through the pass/fail program
24	Tuesday	Withdrawal from classes begins (all divisions) Begin 90% withdrawal refund (full-term classes) Begin 50% withdrawal refund for Professional Studies session one Begin 50% withdrawal refund for Online Technologies/TESOL session one
25	Wednesday	First Student Health warnings for students not in compliance Begin 30% Withdrawal Refund for Counselor Education session one

31	Tuesday	Begin 50% withdrawal refund (full-term classes) Begin 20% withdrawal refund for Professional Studies session one Begin 20% withdrawal refund for Online Technologies/TESOL session one Begin 0% withdrawal refund for Counselor Education session one
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February 2017

Date	Day	Event
1	Wednesday	Second Student Health warnings for students not in compliance
3	Friday	Summer 2017 schedule due to Student Records & Financial Services Fall 2017 schedule and advisement guide information to department chairs and program directors
7	Tuesday	50% withdrawal refund (full-term classes) Begin 0% withdrawal refund for Professional Studies session one Begin 0% withdrawal refund for Online Technologies/TESOL session one
8	Wednesday	Third Student Health warnings for students not in compliance
14	Tuesday	Begin 25% withdrawal refund (full-term classes)
15	Wednesday	Student Progress Report submission by faculty begins Student Health registration cancellations for students not in compliance Exam schedule available in my Canisius Counselor Education session two ends
17	Friday	Fall 2017 schedule due to associate deans
20	Monday	Presidents' Day holiday – no classes in session, except graduate business classes
21	Tuesday	Presidents' Day holiday – no classes 25% withdrawal refund (full-term classes)
22	Wednesday	Student Progress Report submission by faculty ends Fall 2017 advisement guide submissions due to Student Records & Financial Services Counselor Education session one grades due Counselor Education session two begins
23	Thursday	Email to designated students regarding Progress Reports
24	Friday	Progress meetings with advisors begin

28	Tuesday	25% withdrawal refund (full-term classes) Begin 30% withdrawal refund for Counselor Education session two
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March 2017

Date	Day	Event
7	Tuesday	25% withdrawal refund(full-term classes) Begin 0% withdrawal refund for Counselor Education session two
10	Friday	Summer 2017 schedule available in MyCanisius Student Progress Report meetings with advisors end Fall 2017 schedule and advisement guide available in myCanisius
11	Saturday	Professional Studies session one ends Online Technologies/TESOL session one ends
13	Monday	Spring Recess begins Summer 2017 undergraduate and graduate registration begins Online Technologies/TESOL session two begins
14	Tuesday	No withdrawal refund (full-term classes)
15	Wednesday	Professional Studies session one grades due Online Technologies/TESOL session one grades due
20	Monday	Classes resume Professional Studies session two begins Begin 50% withdrawal refund for Online Technologies/TESOL session two
27	Monday	Student Deficiency Report submission begins by faculty Begin 50% withdrawal refund for Professional Studies session two Begin 20% withdrawal refund for Online Technologies/TESOL session two
28	Tuesday	First Student Health warnings for students not in compliance in Professional Studies session two
29	Wednesday	Counselor Education session two ends

April 2017

Date	Day	Event
3	Monday	Fall 2017 Graduate Registration Begins Begin 20% withdrawal refund for Professional Studies session two Begin 0% withdrawal refund for Online Technologies/TESOL session two

4	Tuesday	Fall 2017 undergraduate registrations begins at 7:30am for students with 72.0 or more earned credit hours Second Student Health warnings for students not in compliance in Professional Studies session two
5	Wednesday	Ignatian Scholarship Day Counselor Education session two grades due Counselor Education session three begins
10	Monday	Student Deficiency Report submission by faculty ends Begin 0% Withdrawal Refund for Professional Studies session two
11	Tuesday	Email to designated students regarding Deficiency Reports Third Student Health warnings for students not in compliance in Professional Studies session two Begin 30% withdrawal refund for Counselor Education session three
13	Thursday	Easter recess - no classes
14	Friday	College closed - no classes
15	Saturday	Easter recess - no classes
17	Monday	Classes resume
18	Tuesday	Fall 2017 undergraduate registrations begins at 7:30am for students with 42.0 - 71.0 earned credit hours Student Health registration cancellations for students not in compliance in Professional Studies session two Begin 0% withdrawal refund for Counselor Education session three
21	Friday	Last day to withdraw from a course
25	Tuesday	Fall 2017 undergraduate registrations begins at 7:30am for students with 0-41.0 earned credit hours

May 2017

Date	Day	Event
1	Monday	First day to withdraw from pass/fail program
3	Wednesday	Counselor Education session three ends
5	Friday	Undergraduate classes end Last day to withdraw from pass/fail program
6	Saturday	Graduate classes end
8	Monday	Final exams begin Final grade entry available in myCanisius
12	Friday	Undergraduate final exams end
13	Saturday	Graduate final exams end Professional studies session two ends

17	Wednesday	Final grades due 9:00am Final grade entry in MyCanisius off at 5:00pm Graduate Commencement Exercises
18	Thursday	Final grades available in myCanisius
19	Friday	Spring Honors Convocation Baccalaureate Mass
20	Saturday	Undergraduate Commencement Exercises
22	Monday	First 5-week undergraduate, Graduate Education and Communication and Leadership sessions begins
29	Monday	Memorial Day – no classes

ACADEMIC YEAR 2017-2018

Please note that additional detail for this calendar is under construction. We will add details in the coming weeks, but wanted to provide the beginning dates, ending dates, and holidays for planning purposes.

SUMMER 2017

May 2017

Date	Day	Event
22	Monday	Summer Classes Begin (First 5-week Session, First 6-week Session, 12-week Session and Full-Term session) Begin Drop/Add for First 5-week Session, First 6-week Session, 12-week Session and Full-Term Session 100% withdrawal refund during Drop/Add
23	Tuesday	Drop/Add ends for First 5-week Session
24	Wednesday	Begin 90% withdrawal refund for First 5-Week Session
25	Thursday	Drop/Add ends for First 6-week Session
26	Friday	Drop/Add ends for 12-week and Full-Term Session Begin 80% withdrawal refund for First 6-Week Session
27	Saturday	Begin 90% withdrawal refund for 12-week and Full-Term Session
29	Monday	Memorial Day - No Classes
31	Wednesday	Begin 50% withdrawal refund for First 5-week Session

June 2017

Date	Day	Event
2	Friday	Graduate Business Make-up Session for Memorial Day (this includes undergraduate business classes in the 6-week session) Begin 60% withdrawal refund for First 6-week Session
6	Tuesday	Begin 50% withdrawal refund for 12-week and Full-Term Session
7	Wednesday	Begin 25% withdrawal refund for First 5-week Session

8	Thursday	Begin 40% withdrawal refund for First 6-week Session
13	Tuesday	Begin 0% withdrawal refund for First 5-Week Session Begin 25% withdrawal refund for 12-week and Full-Term Summer Session
14	Wednesday	Begin 20% withdrawal refund for First 6-week Session
20	Tuesday	Begin 0% withdrawal refund for First 6-week Session, 12-week Session and Full-Term Session
24	Saturday	First 5-week Session Classes End

July 2017

Date	Day	Event
1	Saturday	First 6-week Session Classes End
3	Monday	President's Holiday - no classes, Canisius College closed
4	Tuesday	Independence Day - No Classes
5	Wednesday	Classes Begin (Second 5-week Session, Second 6-week Session) Begin Drop/Add for Second 5-week Session and Second 6-week session 100% withdrawal refund during Drop/Add
6	Thursday	Drop/Add ends for Second 5-week Session
7	Friday	Begin 90% withdrawal refund for Second 5-week Session
11	Tuesday	Drop/Add ends for Second 6-week Session
12	Wednesday	Begin 80% withdrawal refund for Second 6-week Session
13	Thursday	Begin 50% withdrawal refund for Second 5-week Session
18	Tuesday	Begin 60% withdrawal refund for Second 6-week Session
19	Wednesday	Begin 25% withdrawal refund for Second 5-week Session
21	Friday	Begin 40% withdrawal refund for Second 6-week Session
25	Tuesday	Begin 0% withdrawal refund for Second 5-week Session
27	Thursday	Begin 20% withdrawal refund for Second 6-week Session

August 2017

Date	Day	Event
2	Wednesday	Begin 0% withdrawal refund for Second 6-week session
5	Saturday	Second 5-week Session Classes End
12	Saturday	Second 6-week Session Classes End and 12-week Session Classes End

FALL 2017

August 2017

Date	Day	Event
28	Monday	Fall Classes Begin

September 2017

Date	Day	Event
4	Monday	Labor Day - No Classes
13	Wednesday	Mass of the Holy Spirit (no MWF classes scheduled to meet)

October 2017

Date	Day	Event
9	Monday	Fall Holiday - No Classes
10	Tuesday	Fall Holiday - No Classes

November 2017

Date	Day	Event
11	Saturday	Veterans Day - Classes in Session
22	Wednesday	Thanksgiving Break - No Classes
23	Thursday	Thanksgiving Break - No Classes
24	Friday	Thanksgiving Break - No Classes
25	Saturday	Thanksgiving Break - No Classes

December 2017

Date	Day	Event
7	Thursday	Undergraduate Classes End
8	Friday	Undergraduate Reading Day
9	Saturday	Graduate Classes End
11	Monday	Final Exams Begin
15	Friday	Undergraduate Final Exams End
16	Saturday	Graduate Exams End
20	Wednesday	Grades Due

SPRING 2018**January 2018**

Date	Day	Event
15	Monday	Martin Luther King Day - No Classes
16	Tuesday	Classes Begin

February 2018

Date	Day	Event
19	Monday	Presidents' Day Break - No Classes
20	Tuesday	Presidents' Day Break - No Classes

March 2018

Date	Day	Event
28	Wednesday	Easter & Spring Recess Begins - No Classes

April 2018

Date	Day	Event
9	Monday	Classes Resume
18	Wednesday	Ignatian Scholarship Day

May 2018

Date	Day	Event
3	Thursday	Undergraduate Classes End
4	Friday	Undergraduate Reading Day

5	Saturday	Graduate Classes End
7	Monday	Final Exams Begin
11	Friday	Undergraduate Final Exams End
12	Saturday	Graduate Final Exams End
16	Wednesday	Grades Due
		Graduate Commencement Exercises
18	Friday	Honors Convocation
		Baccalaureate Mass
19	Saturday	Undergraduate Commencement Exercises

ACADEMIC YEAR 2018-2019

Please note that additional detail for this calendar is under construction. We will add details in the coming weeks, but wanted to provide the beginning dates, ending dates, and holidays for planning purposes.

SUMMER 2018**May 2018**

Date	Day	Event
21	Monday	Summer Classes Begin (First 5-week Session, First 6-week Session, 12-week Session)
28	Monday	Memorial Day - No Classes

June 2018

Date	Day	Event
1	Friday	Graduate Business Make-up Session for Memorial Day (this includes undergraduate business classes in the 6-week session)
23	Saturday	First 5-week Session Classes End
30	Saturday	First 6-week Session Classes End

July 2018

Date	Day	Event
2	Monday	Classes Begin (Second 5-week Session, Second 6-week Session)
4	Wednesday	Independence Day - No Classes

August 2018

Date	Day	Event
4	Saturday	Second 5-week Session Classes End
11	Saturday	12-week Session Classes End and Second 6-week Session Classes End

FALL 2018**August 2018**

Date	Day	Event
27	Monday	Fall Classes Begin

September 2018

Date	Day	Event
3	Monday	Labor Day - No Classes

October 2018

Date	Day	Event
8	Monday	Fall Holiday - No Classes
9	Tuesday	Fall Holiday - No Classes

November 2018

Date	Day	Event
11	Sunday	Veterans Day
21	Wednesday	Thanksgiving Break - No Classes
22	Thursday	Thanksgiving Break - No Classes
23	Friday	Thanksgiving Break - No Classes
24	Saturday	Thanksgiving Break - No Classes

December 2018

Date	Day	Event
6	Thursday	Undergraduate Classes End
7	Friday	Undergraduate Reading Day
8	Saturday	Graduate Classes End
10	Monday	Final Exams Begin
14	Friday	Undergraduate Final Exams End
15	Saturday	Graduate Exams End
19	Wednesday	Grades Due

SPRING 2019**January 2019**

Date	Day	Event
14	Monday	Classes Begin
21	Monday	Martin Luther King Day - No Classes

February 2019

Date	Day	Event
18	Monday	Presidents' Day Break - No Classes
19	Tuesday	Presidents' Day Break - No Classes

March 2019

Date	Day	Event
18	Monday	Spring Recess Begins - No Classes
25	Monday	Classes Resume

April 2019

Date	Day	Event
10	Wednesday	Ignatian Scholarship Day
17	Wednesday	Easter Break - No Classes
18	Thursday	Easter Break - No Classes
19	Friday	Easter Break - No Classes
22	Monday	Classes Resume

May 2019

Date	Day	Event
2	Thursday	Undergraduate Classes End
3	Friday	Undergraduate Reading Day
4	Saturday	Graduate Classes End
6	Monday	Final Exams Begin

10	Friday	Undergraduate Final Exams End
11	Saturday	Graduate Final Exams End
15	Wednesday	Grades Due
		Graduate Commencement Exercises
17	Friday	Honors Convocation
		Baccalaureate Mass
18	Saturday	Undergraduate Commencement Exercises

ABOUT CANISIUS

OUR MISSION

Canisius College, a Catholic and Jesuit university, offers outstanding undergraduate, graduate and professional programs distinguished by transformative learning experiences that engage students in the classroom and beyond. We foster in our students a commitment to excellence, service and leadership in a global society.

AT THE CORE OF OUR MISSION

Catholic & Jesuit

Canisius is an open, welcoming university where our Catholic, Jesuit mission and identity are vitally present and operative. It is rooted in the Catholic intellectual tradition's unity of knowledge and the dialogue of faith and reason. Founded by the Society of Jesus as a manifestation of its charism, Canisius espouses the Jesuit principles of human excellence, care for the whole person, social justice, and interreligious dialogue. Jesuit spirituality calls us to seek God in all things and Jesuit education aims to form students who become men and women for and with others.

Transformative Learning & Student Engagement

Steeped in Jesuit ideals, our undergraduate and graduate academic programs are distinguished by academic excellence, student-faculty interaction, and a variety of experiential learning opportunities that engage students and transform the mind and spirit. Our undergraduate core curriculum enriches students' academic pursuits and delivers a strong foundation in liberal arts, critical thinking, and diversity. Graduate and professional programs promote the application of theory to practice.

Service & Leadership

Benefitting from academically-rich, values-based experiences in their interactions with faculty, staff, and community members, students develop their abilities to lead and inspire others. At Canisius, students practice these leadership skills in the classroom and through co-curricular activities in ways that animate our Jesuit values to serve others and benefit our world.

OUR VALUES

Canisius College is committed to the following values that emerge from our Catholic, Jesuit mission to guide all of our decisions and actions:

- *Cura personalis*, care and respect for the whole person, and a holistic approach to education
- A dedication to the pursuit of *magis*, excellence, service, and innovation
- Principled leadership and personal accountability
- An individual and institutional responsibility to work for social justice and transform suffering and injustice in the world
- A deep respect for the natural world, and a commitment to its responsible stewardship.

OUR PROMISE

Canisius College, a Catholic and Jesuit university, will provide students with a challenging, engaging education that will enable them to succeed in a rapidly changing global society. Through close collaboration with faculty, staff, alumni, and peers, our students will cultivate the skills, habits of mind, and values to pursue successful professional careers and lead meaningful

intellectual lives. Canisius will nurture students' sense of responsibility to create a more just, equitable, and sustainable world.

OUR VISION

Canisius will be the leading educational choice for those who seek innovative learning opportunities rooted in our Jesuit mission and values.

Canisius seeks to:

- Be a vibrant and progressive university committed above all else to academic excellence and the authentic search for truth.
- Embrace its Catholic, Jesuit identity as its defining characteristic and be committed to enhancing and enriching that identity.
- Recruit faculty with outstanding credentials and foster academic excellence through extraordinary teaching and scholarship.
- Embrace its urban roots in Buffalo, New York and become more engaged with the world around it by addressing issues and challenges in the neighborhood, city, region, nation, and world.
- Engage alumni and friends and draw them into a deeper lifelong relationship with the university.
- Be committed to quality and continuous improvement in everything that we do.

AN URBAN CAMPUS WITH A LONG HISTORY AND TRADITION

As an urban college, Canisius enjoys a special relationship with the city of Buffalo and the Western New York region. The concept of community service on which the college prides itself is best evidenced by the large number of Canisius graduates who have occupied important positions in the professional, educational, commercial and political life of the city and its surrounding communities. Buffalo's largest private college is named after Saint Peter Canisius, a 16th-century Dutch scholar. The college's founders were guided by the same educational ideals which inspired several European universities and initiated a tradition of service to student and community.

Starting out in 1870 as a single building in the center of downtown Buffalo, Canisius College has since expanded to cover the more than 72 acres and 36 academic buildings on its campus on Main Street. It is easily accessible by expressway, subway and bus routes.

In addition to the College of Arts and Sciences, Canisius includes the Richard J. Wehle School of Business, the School of Education and Human Services, a Graduate Division and a Summer Session, with a total enrollment for 2015 of approximately 3,900 students.

Canisius College is governed by an independent self-perpetuating Board of Trustees under a charter granted by the Board of Regents of the University of the State of New York.

THE OFFICE OF MISSION & IDENTITY

The Office of Mission & Identity promotes the deeper understanding and invites the active engagement of the entire Canisius College community, across all our faith traditions and human ideals, in living our university's Catholic, Jesuit educational mission. Mission & Identity engages people of all faith traditions and those with no particular faith. Catholic, interfaith, and humanist describe the three categories of belief that guide and inspire people on our campus. The Office of Mission & Identity is ready to collaborate with all the members of our community.

The Office of Mission & Identity is different from Campus Ministry. Campus Ministry focuses on providing pastoral, sacramental, and service outreach opportunities for students, faculty, and staff. The Office of Mission & Identity develops and delivers strategic initiatives in the academic, student life, alumni, advancement, and trustee/regent areas of the school. The focus is on our Catholic, Jesuit character and how we can make it real and deepen it in our daily tasks and reflection.

If you are attending classes, asking questions, and engaging your education in and out of the classroom, chances are very good you are already participating in the mission and identity of Canisius. Further opportunities to be involved in the work of Mission & Identity will include attendance at Mission and Identity sponsored talks and activities on campus.

THE FACULTY

The college seeks faculty members known to be creative and energetic teachers who also seek to engage their students in their research and scholarship. Modest class size is the norm, and interaction among students and faculty is easy and natural.

Canisius' full time faculty members have degrees from over 100 different universities, including 27 degrees from Europe, ten from Asia/Pacific, 16 from Canada and two from South America. Each of the 225 full-time faculty members has been chosen for his or her academic competence, ability to teach, interest in research and moral integrity. The college's present faculty is a group of highly trained, dedicated individuals who take a personal interest in the students under their charge. Over 96 percent have earned doctoral or terminal degrees in their fields.

Over 290 individuals from the fields of law, health care, education, business, government, science, technology and the arts contribute as part time faculty members to the mission of Canisius College.

ACCREDITATION

Canisius College received its authority to confer bachelor's degrees in 1883 when it was incorporated by the Regents of the University of the State of New York. In 1894, the college offered its first course in the graduate program leading to the degree of master of arts.

Canisius College is an accredited member of the Middle States Commission on Higher Education¹. All of the college's programs are registered by the Regents of the University of the State of New York through the State Education Department². The undergraduate programs in Business Administration and the MBA program are accredited by the Association to Advance Collegiate Schools of Business International³. The chemistry major is accredited by the American Chemical Society⁴, and the athletic training major by the Commission on Accreditation of Allied Health Education Programs⁵. The programs of the School of Education and Human Services designed to prepare students for school-based careers are accredited by the National Council for Accreditation of Teacher Education⁶. The Graduate Program for Teachers of the Deaf is accredited by the Council on the Education of the Deaf.⁷ The Graduate Programs in Counseling are accredited by the Council for the Accreditation of Counseling and Related Educational Programs.⁸

¹ Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104-2680. Telephone: 267-284-5000.

² University of the State of New York, State Education Department, Board of Regents, Room 110EB, Albany, NY 12234. Telephone: 518-474-5889.

³ Association to Advance Collegiate Schools of Business-International, 777 South Harbour Island Blvd, Suite 750, Tampa, FL 33602-5730. Telephone: 813-769-6500.

⁴ American Chemical Society, 1155 Sixteenth St, NW, Washington, DC 20036. Telephone: 800-227-5558 (US only) 202-872-4600.

⁵ Commission on Accreditation of Athletic Training Education, 2201 Double Creek Drive, Suite 5006, Round Rock, TX 78664. Telephone: 612-733-9700.

⁶ Council for the Accreditation of Educator Preparation, formerly National Council for Accreditation of Teacher Education, 1140 19th St NW, Suite 400 Washington, DC 20036. Telephone: 202-223-0077.

⁷ Council on the Education of the Deaf, Dr. Tony Martin, Lamar University, PO Box 10076, Beaumont, TX 77710. Telephone: 409-880-8175.

⁸ Council for Accreditation of Counseling and Related Educational Programs, 1001 North Fairfax Street, Suite 510, Alexandria VA 22314. Telephone: 703-535-5990.

THE GRIFF CENTER FOR ACADEMIC ENGAGEMENT

The Griff Center provides comprehensive programs, services, and resources to support student academic and career success and a transformative learning experience grounded in our Catholic, Jesuit mission. As a hub for academic and career advising, the center has staff ready to assist students in their academic and professional development.

THE ANDREW L. BOUWHUIS LIBRARY

The quality of any educational institution is determined largely by the proficiency of its faculty and the excellence of the information resources available to support the curriculum.

The ALB Library has evolved into a learning commons to better accommodate collaborative learning styles and to provide additional support for student learning. The Library has a variety of study and workspaces; a Curriculum Materials Center for K-12 teacher training; reservable group workrooms; audio-visual areas to practice presentations; and a Tim Hortons coffee shop. Canisius students have at their disposal an excellent library collection to support student research. The Library subscribes to thousands of full text electronic journals, hundreds of article databases, and hundreds of print journals. Electronic resources can be accessed from computer labs and residence halls on campus and remotely from any connected device. The Library has a substantial complement of equipment, including computers; printers; cameras (digital still or video); projectors; headphones (with or without microphone); e-book readers; and SmartBoards.

Canisius students and faculty have convenient and rapid access to ten million volumes in the ConnectNY academic library consortium and to the extensive research collections of the Center for Research Libraries. Additional library materials are available via Interlibrary Loan.

When school is in session, the Library is open every day of the week for study and research and is open nights until 2:00 a.m. from Sunday through Thursday. Professional librarians and technical staff are available to provide assistance with research or in the use of the Library and its facilities in person, via email, by text, or through chat (24/7).

The Rev. J. Clayton Murray, S.J. Archives & Special Collections, located in Bouwhuis Library, houses information related to the history of Canisius College. It also holds unique materials with strengths in civil rights and social

justice, Catholicism, philosophy, local history, and rare books dating to the 15th century. Visitors and researchers are welcome.

the ability to engage in the activities involved in the education requirements or occupation for which application has been made.

COMPUTER FACILITIES

Wireless networking is available throughout the campus. Instructional computing facilities include over 300 personal computers, as well as scanners and printers. Computers in student labs have access to word processing, spreadsheet, database, presentation, web development, and statistical analysis software. There are several Internet Plazas located around campus where students may check their electronic mail or access the web. All computers are connected to the Internet and have access to extensive online research databases provided by the Andrew L. Bouwhuis Library.

Residence halls are wired for satellite TV (including several Canisius-oriented channels) and Internet access. Most classrooms provide video and computer projection for the instructor. Several departments, including Digital Media Arts and Computer Science, maintain a substantial complement of computing equipment specific to their needs.

Canisius College has an extensive website and portal (myCanisius) that includes web-based electronic mail, course materials, course discussion boards and course registration. The myCanisius portal can be reached from the Canisius web site (<http://www.canisius.edu>). Most instructors post course materials in our learning management system, Desire2Learn (D2L), which is accessed through myCanisius. In addition, access to many student services including web-based electronic mail, course registration, and college alerts is available from this portal.

The ITS Help Desk is available for walk-up assistance in the Library, by phone at 716-888-8340, or by email (helpdesk@canisius.edu).

RETENTION

Retention from freshman to sophomore years has been as follows for the last four years:

- Class of 2015 – 82%
- Class of 2016 – 80%
- Class of 2017 – 86%
- Class of 2018 – 82.5%

As defined by the federal government, the retention rate is the percentage of first-time bachelor's degree-seeking undergraduates from the previous fall who are again enrolled in the current fall. Freshmen are defined as those who registered prior to their initial matriculation. Sophomores are those still registered following the drop/add period one year later.

NON-DISCRIMINATION

Canisius College does not discriminate on the basis of age, race, religion or creed, color, sex, national or ethnic origin, sexual orientation, marital status, veteran's status, genetic predisposition or carrier status, or disability in administration of its educational policies, employment practices, admissions policies, scholarship and loan programs, and athletic and other school administered programs. Canisius admits students of any age, race, religion or creed, color, sex, national or ethnic origin, sexual orientation, marital status, or veteran's status to all rights, privileges, programs and activities generally accorded or made available to students at the college. It continues to be the policy of Canisius College not to discriminate on the basis of handicap. No person is denied employment, admission, or access solely because of any physical, mental, or medical impairment which is unrelated to

ADMISSION POLICIES

Men and women of ability and achievement are welcome in all divisions of Canisius College. Admissibility as students is determined based on aptitude, achievement and character.

SECONDARY SCHOOL PREPARATION

The secondary school program of studies should include a minimum of 16 units of credit in academic subjects. The college considers academic subjects as those stressing intellectual development, including but not limited to English, social studies, science, mathematics and foreign language.

APPLICATIONS FOR FRESHMAN ADMISSION

Candidates for freshman admission to the college should complete the admissions application either in paper form or online. Alternatively, students may submit the Common Application, which is given full and equal consideration. A complete application requires an official high school transcript, a school counselor recommendation, official test scores from the SAT-I or ACT examinations, an essay and any other supporting documentation the student chooses to submit. Records of homeschooling and GED must be submitted to the Office of Admission and are evaluated on a case-by-case basis.

ROLLING ADMISSION AND PRIORITY NOTIFICATION

Canisius adheres to a rolling admissions policy, which allows students to apply at any time until the class is full. Canisius offers an early action deadline of November 1. Students who apply by this date will be notified of an admissions decision and scholarship award by December 15 or earlier. Students who do not apply by this date are encouraged to apply by March 1 for full and equal consideration.

CONDITION OF ADMITTANCE

Students who are accepted for freshman admission are admitted with the expectation that they will successfully complete their senior year of high school and graduate prior to enrollment at Canisius. Failure to graduate from high school or to maintain the academic standard for which admission has been granted are sufficient grounds to rescind an offer of admission to Canisius.

EARLY ADMISSION POLICY

Canisius College will accept approved candidates for early admission from high schools that officially approve of this policy and whose curricula are satisfactory. Early admission candidates are defined as students who have completed all or a majority of their high school graduation requirements in less than four years. Students applying for early admission must adhere to all freshmen admission policies.

Additional conditions for early admission are as follows:

1. Students must be recommended by their high school principal or counselor with the understanding that students will only be recommended if they have demonstrated excellence in academic achievement and motivation.

2. Students must have completed three years of their high school curriculum prior to enrollment at Canisius. Exceptions to this rule are very unusual.
3. Ordinarily, students must have reached their sixteenth birthday or will reach their sixteenth birthday by the end of the first semester of freshman year.

CANDIDATE'S REPLY DATE AGREEMENT — MAY 1

Canisius College adheres to the College Entrance Examination Board's Candidates' Reply Date Agreement (CRDA). According to this policy students may submit their tuition (and housing) deposit upon receipt of their letter of acceptance or any time prior to and including May 1. The deposit is non-refundable after May 1.

INTERNATIONAL STUDENTS

International candidates for undergraduate admission should submit a completed application and certified transcripts from all secondary schools or colleges attended. Transcripts not in English should be accompanied by a certified English translation. International students whose native language is not English, and/or students whose primary language of instruction is not English, are required to submit a Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) score. All documents should be submitted to the Office of Undergraduate Admissions.

In order to attend Canisius College, Canadian and other international students must receive a Certificate of Visa Eligibility (Form 1-20). This form is issued by Canisius College after the student has submitted proof of the student's ability to meet all educational and living expenses for the entire period of study. The student must provide this proof by filling out the Canisius College International Student Certification of Finances form, which includes a budget worksheet to help the student determine the total educational expenses. This form must have enough funds listed (in U.S. dollars) and verified to cover the full amount of the student's educational and living expenses. This form must be submitted to the Office of Admissions.

APPLICANTS WITH CRIMINAL BACKGROUNDS

Canisius College is committed to ensuring that students have the ability to benefit from the education received at the College. Certain affiliates associated with the college require that students placed in their facility for clinical/internship/field placement experiences clear a criminal background check prior to placement. Students whose background check reveals a criminal history may be prevented access to the clinical site, and as a result, the student may not have sufficient clinical experience to successfully complete the program. Additionally, licensing boards may deny the individual the opportunity to sit for an examination if an applicant has a criminal history.

APPLICATIONS FOR TRANSFER ADMISSION

Students who have graduated from high school and have completed at least three credit hours of post-secondary, college-level work as a matriculated student will be considered for transfer admission to Canisius College. Candidates for transfer admission should submit an application for transfer admission and submit official transcripts for all colleges attended. Additionally, a Transfer Recommendation Form completed by

the dean of students or other appropriate official from the most recent college attended is required. Candidates who have completed fewer than 24 credit hours of college level work at the time of application must also submit an official high school transcript. All applicants applying to the School of Education must submit an official high school transcript and SAT or ACT scores even if more than 24 credit hours of college level work have been completed.

ADULT APPLICANTS

Applicants for freshmen or transfer admission who have had a break in their academic work must submit a statement of activity for the period representing the break in their education.

DISMISSED STUDENTS

Academic policy at Canisius College prohibits acceptance of a student who has been academically dismissed from another college or university until one academic year after date of dismissal. Exceptions to this policy may be made after review of the applicant's academic credentials by the appropriate academic dean.

POLICIES AND PROCESSES FOR INCOMING FRESHMEN

Under the conditions indicated below, students may obtain credit for college-level courses delivered in high school through advanced placement exams, International Baccalaureate scores, CLEP exams, and submission of transcripts from accredited two- and four-year institutions. Requests for acceptance of such credits should be directed to the Office of Admissions for processing and then directed to the Griff Center for Academic Engagement who will consult with the major program or department as needed. A maximum of 30 credit hours will be granted to first-time freshmen enrolling directly from high school.

College Courses Delivered in High School Settings

Students who achieve a grade of C- or above will earn at least elective credit for classes offered in their high school by accredited colleges. An official college transcript must be received by Canisius College before credit can be awarded. All requests to use such credits to fulfill core curriculum or major requirements should be made to the Griff Center for Academic Engagement.

Advanced Placement Courses

Students achieving a 3 or higher on a College Entrance Examination Board Advanced Placement Test will normally earn at least elective credit toward a degree at Canisius College. (Canisius College reserves the right to deny credit for a 3 in a particular Advanced Placement Test if subsequent student performance in relevant courses at Canisius College has provided evidence that a 3 on that test does not demonstrate college level competence.) Core curriculum credit for such courses is subject to approval by the Office of Academic Affairs, and credit in the major is subject to approval of course equivalency by the major department or program. Official results of the exam must be sent from the College Board to Canisius College before credit can be awarded. All such requests should be directed to the Student Records and Financial Services Center who will consult with the major program or department as needed.

College Level Examination Program

Students who are applying for admission or who are presently in attendance may obtain credit for previously completed examinations sponsored by the College Level Examination Program (CLEP) of the College Entrance

Examination Board (CEEB). The minimum acceptable grades for these exams are "Pass" for exams graded Pass/Fail, "C" for exams with letter grades, and 50 on exams graded on a standard score scale of 20 to 80. Credit is not awarded for the CLEP general examinations. Credit in appropriate subject area exams is granted by the Student Records and Financial Services Center after the student has matriculated at the college. However, not all CLEP exams are acceptable as transfer credits. In addition, credits to be used in fulfilling departmental major requirements must first be approved in writing by the department chair. Students should plan to complete all their coursework at the college. Permission for matriculating students to take CLEP exams to fulfill degree requirements must be requested from the appropriate associate dean and will be granted only under extraordinary circumstances.

Regents College Examinations

Students who are applying for admission to Canisius College or who are presently in attendance may be eligible, under unusual circumstances, to receive college credit for previous experience through the Regents College Examination program. The minimum acceptable score on the examinations is 50. Students who have already taken such examinations must receive permission to use the credit from the appropriate assistant or associate dean.

POLICIES FOR TRANSFER STUDENTS

A transfer credit evaluation will be completed for transfer students who are accepted for admission to Canisius. A maximum of 60 credit hours may be transferred from two-year colleges and at least 60 more credit hours must be earned at Canisius in order to be awarded the bachelor's degree. Students transferring from four-year institutions must complete at least 30 credit hours at Canisius, including at least 18 in their major, in order to earn the bachelor's degree.

Transfer credit from accredited two- and four-year institutions of higher education is granted when the course objectives for the completed work are substantially the same as the course objectives at Canisius College. Transfer credit is awarded only for courses with a minimum grade of C- or better.

Teacher certification candidates must meet the state of New York and the Council for Accreditation of Educator Preparation (CAEP) admission requirements. In addition, a grade of C or better is required to transfer courses listed as major courses in teacher education (including special education, adolescence education, and childhood education), physical education, and health education programs. Once transcripts have been submitted to and reviewed by the Office of Student Records, the student must meet with the appropriate associate dean to review the transfer credit, determine the appropriate major, and register for classes.

Canisius College has a variety of articulation and dual degree agreements with community and junior colleges throughout New York State. These agreements recognize specific programs and majors at the two-year institutions that allow students the most comprehensive transfer of courses and credits. Students at these institutions should consult with their academic counseling center for specific information on articulated programs and majors.

POLICIES FOR A SECOND DEGREE

Individuals may enroll in a second baccalaureate degree if they can demonstrate that a second bachelor's degree is necessary for their career. Individuals must fulfill the admissions requirements for the degree sought and must receive approval from the appropriate dean prior to matriculation

in the program. These individuals, however, should be advised that in most cases it is unnecessary to receive a second baccalaureate degree; rather they merely need to complete a prescribed series of courses that apply to their career or life needs.

If they still wish to receive the second degree, the following policy will be the guideline: The credits received from the first bachelor's degree will be applied as transfer credit to the second degree. The first degree need not have been completed at Canisius. The minimum requirements for the second degree include the completion of a minimum of at least 30 credit hours at Canisius, with at least 18 credit hours of the courses being taken from the selected major. The student must complete all the departmental requirements for the degree, as well as the general graduation requirements, including a 2.00 grade point average for all courses taken at Canisius.

Individuals should meet with the appropriate dean or advisor to outline the program of courses necessary for the completion of the second degree.

MATRICULATED STUDENTS

Most undergraduate students enter the College as matriculants, i.e., as students who are enrolled in a specific program leading to an undergraduate degree. Each student is responsible for the completion of the requirements and course prerequisites in force in the student's program of study at the time of matriculation. A student who interrupts matriculation for more than two semesters must apply for readmission and is bound by the requirements in force at the time of readmission.

NON-MATRICULATED STUDENTS

Non-matriculated students, i.e., individuals who are not working towards a degree at Canisius, may be approved for a maximum of 9 credit hours per semester. Courses requiring prerequisites may be taken only when supporting documents are presented at the time of application insuring that the prerequisite courses have been successfully completed. Non-matriculated students will receive the normal college credit for all work successfully completed.

Students enrolled on a non-matriculated basis who wish to enroll as matriculated students must submit all required admission documentation to the Office of Admissions based on their status as either a freshman or transfer student.

VISITING STUDENTS

Students from other colleges or universities who wish to attend Canisius for the purpose of transferring earned credits to their home institutions must apply for entrance through the Office of Undergraduate Admissions. An application for visitation must be accompanied by a letter of permission from the appropriate academic dean at the home institution. The letter, in substance, should state that the applicant has permission to take courses at Canisius for the purpose of transfer back to the home institution.

AUDITORS

Students wishing to audit courses at Canisius College must secure the approval of the Student Records and Financial Services Center. No credit is granted for an audited course. Responsibility for examination, assignments and attendance is determined by the faculty member teaching the course. No student will be permitted to change from audit to credit after the end of the add/drop period. Auditing fees are listed in the Tuition section of the current Undergraduate Catalog.

TUITION, FEES, AND AID

- Student Financial Aid (p. 18)
- Tuition & Fees (p. 25)

The Student Records and Financial Services Center handles most financial transactions between students and the college including tuition collection and payment plans, meal plan arrangements, parking permits, and the disbursement of work study paychecks. The center is located on the first floor of Bagen Hall. The center can also be reached by mail, phone, or email (stuacct@canisius.edu).

Mailing address:
Student Records & Financial Services Center
Canisius College
2001 Main Steet
Buffalo, NY 14208

Phone number:
(716) 888-2600
(800) 238-8160

Student Financial Aid

The cost of financing a college education is an important consideration for both students and parents. A Canisius College education is affordable and can be made financially possible through the many types of financial assistance administered by the Student Records and Financial Services Center. The staff of this office is available to help both students and parents plan for the financing of a Canisius education.

Students seeking federal and state financial assistance or institutional funds must complete the Free Application for Federal Student Aid (FAFSA).

The FAFSA worksheet may be obtained online at the FAFSA website (<https://www.fafsa.gov>). Incoming students (freshmen and transfers) who complete their applications by February 15 will receive first preference in the evaluation procedure. Returning students should submit their applications by April 15 for first-preference consideration. These dates are recommendations. However, students who do not meet these dates are urged to apply at any time for second consideration.

General Eligibility Requirements

To be considered for student financial aid, a student must:

1. Study at least half-time at an educational institution approved by the federal government. It may be located in New York, in another state, or in a foreign country.
2. Be a U.S. citizen or eligible non-citizen.
3. Be a resident of New York State for 12 months immediately preceding the first term for which the student is applying for aid (for New York State financial aid programs).
4. Be in good academic standing and making satisfactory academic progress.
5. Have no outstanding debt from a previous student loan default and must not owe a refund on any federal grant at any institution.
6. Demonstrate compliance with applicable Selective Service laws.
7. Demonstrate financial need or meet individual program or scholarship requirements.

8. Have never received a drug conviction while receiving aid or have satisfied federal requirements to reinstate eligibility after a drug conviction.

ESTIMATED STUDENT BUDGET FOR THE 2016-2017 ACADEMIC YEAR

Fee	Commuter	Resident
Tuition	\$ 33,948	\$ 33,948
Fees	1,476	1,476
Books/Supplies	1,000	1,000
Room and Board	2,200	13,022
Personal/Recreation	700	700
Transportation	800	800
Total	\$ 40,124	\$ 50,946

REPEATING A COURSE

The repeating of a course may have an impact on a student's financial aid. Once a student has received financial aid for a course for which they have obtained a passing grade, they may not receive New York State aid again for that course.

Therefore, students repeating a course in this instance should take care to enroll in enough credit hours in addition to the course to maintain their aid. For example: You are registered for 12 credits and 3 of those credits are for a repeated course. For New York State aid purposes (TAP, HEOP, Merit Scholarship, etc.) you are only taking 9 credits and are not eligible for state aid. You would need to register for 15 credits in order to keep your state financial aid.

Students repeating a failed course, or a course requiring a higher grade for your major requirement in order to graduate, may be able to receive aid for that repeated course.

CRITERIA FOR STUDENT FINANCIAL AID CONSIDERATION

In order to be considered for student financial aid, students must matriculate. That is, they must have satisfied the entrance requirements and be following a prescribed program of study toward a degree. Non-matriculated students are students who are not pursuing a degree at Canisius College, but have met the college's entrance requirements and have received the permission of the appropriate dean to take classes. Non-matriculated students are not eligible for financial aid.

Student Financial Aid awards are generally based on full-time attendance, which is at least 12 credit hours per academic semester. It is recommended that students contact the Student Records & Financial Services Center before reducing their academic load below 12 credit hours per semester in order to determine the effect on their financial aid. Students whose academic loads do fall below 12 hours per semester are required to contact the Student Records and Financial Services Center because it is very likely that the financial aid award will be affected. Certain aid programs are available to students who have enrolled part-time for at least six credit hours per semester. Students should contact the Student Records and Financial Services Center for further information.

Note: To receive financial aid, a student must remain "in Good Academic Standing." For further information, the student should read the section entitled Satisfactory Academic Standing.

OTHER INFORMATION

Awards Notification

Freshmen applicants who submit all necessary forms by February 15 are notified by the Student Records and Financial Services Center by March 1, or before the May 1 Candidate Reply Date. Upperclassmen and graduate students who submit applications by April 15 receive award notices by July 1. Students submitting applications after April 15 are notified as soon as possible.

Over-Awards

Each year a number of financial aid recipients are “over-awarded.” As a result, checks are withheld, and, in some cases, students are billed for funds already disbursed. This problem arises because of the length of time needed to match funds from various institutional sources and/or outside agencies against the individual student’s record. To avoid this problem, students are urged to notify the Student Records & Financial Services Center promptly when they receive additional funds from any source not listed in their award letters, or when a student changes his/her enrollment status.

RETURN OF TITLE IV FUNDS

It is the policy of Canisius College to return federal funds which have been dispersed to an undergraduate student who has withdrawn or stopped attending the College to the Federal Title IV programs in compliance with the regulations of the Department of Education.

In order to be eligible for and retain federal financial aid (Title IV) funds, students must maintain enrollment in classes for the entire semester. Failure to do so results in a recalculation of aid funds and may result in a return of unearned Title IV funds.

If a student leaves the College prior to completing 60% of a payment period or semester, the Student Records and Financial Services Center will recalculate eligibility for Title IV funds. Recalculation is based on the percentage of earned aid using the following Federal Return of Title IV funds formula:

Percentage of payment period or term completed = the number of days completed up to the withdrawal date divided by the total days in the payment period or semester. (Any break of five days or more is not counted as part of the days in the semester.) This percentage is also the percentage of earned aid. Funds are returned to the appropriate federal program based on the percentage of unearned aid using the following formula:

Aid to be returned = (100% of the aid that could be disbursed minus the percentage of earned aid) multiplied by the total amount of aid that could have been disbursed during the payment period or semester.

If a student earned less aid than was disbursed, the College will return a portion of the funds and the student will be required to return a portion of the funds. When Title IV funds are returned, the student borrower may owe a debit balance to the College.

If the student did not receive all of the funds that were earned prior to withdrawing, a post-withdrawal disbursement may be due. If the post-withdrawal disbursement includes loan funds, the student must give permission before the funds can be disbursed. The College may automatically use all or a portion of the post-withdrawal disbursement of grant funds for tuition, fees, and room and board charges. Permission is required to use the post-withdrawal grant disbursement for all other College charges. Students will be notified of post-withdrawal disbursement eligibility within 30 days of the date of withdrawal determination.

The College will return the Title IV funds within 45 days of the date it determines the student withdrew. Title IV funds will be returned to the Department of Education in the following order:

1. Unsubsidized Federal Stafford Loan
2. Subsidized Federal Stafford Loan
3. Federal Parent (PLUS) Loan
4. Federal Pell Grant
5. Federal Supplemental Opportunity Grant
6. Other Title IV Assistance
7. Other state
8. Private and Institutional Aid
9. Student

NEW YORK STATE TUITION ASSISTANCE PROGRAM

The Tuition Assistance Program (TAP) is a state-funded program for New York State residents. It may be used only at approved post-secondary institutions within New York State. Grants range from \$500 to \$5,165 a year, based on the family’s net taxable income for the previous year. There is no competition for this award. To be eligible, students must be full-time matriculated students who meet the standards stated below. Students may receive only eight semesters of TAP as undergraduates. However, students enrolled in approved five-year programs are eligible for 10 semesters of undergraduate TAP. At this time, only HEOP (Higher Education Opportunity Program) is such an approved program at Canisius College. The following table illustrates the amount of a TAP award at Canisius.

2016-2017 TAP

2014 New York State Net Taxable Income	TAP Award
under 7,000	5,165
8,000	5,095
9,000	5,025
10,000	4,955
11,000	4,885
12,000	4,785
13,000	4,685
14,000	4,585
15,000	4,485
16,000	4,385
17,000	4,285
18,000	4,185
19,000	4,065
20,000	3,945
21,000	3,825
22,000	3,705
23,000	3,585
24,000	3,465
25,000	3,345
26,000	3,225
27,000	3,105
28,000	2,985
29,000	2,865

30,000	2,745
31,000	2,625
32,000	2,505
33,000	2,385
34,000	2,265
35,000	2,145
36,000	2,025
37,000	1,905
38,000	1,785
39,000	1,665
40,000	1,545
41,000	1,425
42,000	1,305
43,000	1,185
44,000	1,065
45,000	945
46,000	825
47,000	705
48,000	585
49,000 - 70,000	500
70,001 - 80,000	500

FEDERAL FINANCIAL AID PROGRAMS

The FAFSA and all requested income verification forms are the required forms for the following programs administered and/or awarded by Canisius College.

Federal Pell Grant

The Federal Pell Grant Program was legislated by the federal government through the 1972 Education Amendments and was amended by the Higher Education Opportunity Act of 2008.

In order to be eligible for this grant, a student must be a U.S. citizen or a permanent resident alien. All full-time and part-time matriculating students should apply for this grant. Federal Pell grants range from \$ 598 to \$5,815 depending on the amount of funds appropriated by the federal government each year. Individual family circumstances and the cost of education at the college being attended are also taken into consideration. The Free Application for Federal Student Aid (FAFSA) is used to apply for the Federal Pell Grant Program. FAFSA worksheets are available online at the FAFSA website (<https://www.fafsa.gov>).

Federal Pell Grant recipients are limited to the equivalent of six academic years of full-time study.

Federal Perkins Loan Program

The Federal Perkins Loan Program is a federally funded program administered by Canisius College and awarded on the basis of financial need. It is available to both full-time and part-time matriculating students. The total undergraduate maximum is \$15,000.

The aggregate maximum for graduate students is \$30,000, including all undergraduate loans through this program.

The annual percentage rate of the loan is 5 percent. Repayment will begin nine months after the student ceases to be enrolled at least on a half-time

basis. There is no interest charged while the student is enrolled in school at least half-time or during the nine-month grace period.

Amount Borrowed	Amount of Payment	Number of Payments
\$1,000	\$90.26	12
2,000	93.64	25
3,000	97.66	39
4,000	127.69	40
6,000	191.53	40
7,000	223.45	40
9,000	287.29	40
10,000	319.21	40

Federal and institutional regulations require students who have taken out a Federal Perkins Loan, a Federal Stafford or Direct Student Loan to complete online pre-loan and exit interviews before graduating or withdrawing from the college. Important information concerning repayment schedules and deferment and cancellation provisions will be provided. It is to the student's advantage to complete these online interviews. The Student Records and Financial Services Center will direct students to the online interview if they withdraw from the college.

FEDERAL WORK-STUDY PROGRAM

The Federal Work-Study Program (FWS) is a federally funded program designed to offer students part-time employment while in school. It is available to both full-time and part-time (at least six hours) matriculating students. Students are employed on campus, ideally in work related to their academic and vocational goals. A student qualifying for Federal Work-Study employment may work between five and 20 hours a week during the academic year and up to 40 hours a week during the summer.

All job referrals are made by the Student Records and Financial Services Center.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT

The Federal Supplemental Educational Opportunity Grant (FSEOG) is a federally funded program administered by Canisius College and based on financial need. Recipients may be either full-time or part-time (at least six hours) matriculating students. At Canisius, grants range from \$200 to \$2,000 a year. This award is a grant, not a loan. FSEOG funds are limited. FSEOG will be awarded to students with exceptional financial need, that is, to students whose financial need exceeds 50 percent of the student budget under which they are evaluated. Priority will be given to students who have the lowest expected family contributions and/or who are eligible for the Federal Pell Grant Program.

RETURN OF TITLE IV FUNDS

It is the policy of Canisius College to return federal funds which have been dispersed to an undergraduate student who has withdrawn or stopped attending the College to the Federal Title IV programs in compliance with the regulations of the Department of Education.

In order to be eligible for and retain federal financial aid (Title IV) funds, students must maintain enrollment in classes for the entire semester. Failure to do so results in a recalculation of aid funds and may result in a return of unearned Title IV funds.

If a student leaves the College prior to completing 60% of a payment period or semester, the Student Records and Financial Services Center will recalculate eligibility for Title IV funds. Recalculation is based on the percentage of earned aid using the following Federal Return of Title IV funds formula:

Percentage of payment period or term completed = the number of days completed up to the withdrawal date divided by the total days in the payment period or semester. (Any break of five days or more is not counted as part of the days in the semester.) This percentage is also the percentage of earned aid. Funds are returned to the appropriate federal program based on the percentage of unearned aid using the following formula:

Aid to be returned = (100% of the aid that could be disbursed minus the percentage of earned aid) multiplied by the total amount of aid that could have been disbursed during the payment period or semester.

If a student earned less aid than was disbursed, the College will return a portion of the funds and the student will be required to return a portion of the funds. When Title IV funds are returned, the student borrower may owe a debit balance to the College.

If the student did not receive all of the funds that were earned prior to withdrawing, a post-withdrawal disbursement may be due. If the post-withdrawal disbursement includes loan funds, the student must give permission before the funds can be disbursed. The College may automatically use all or a portion of the post-withdrawal disbursement of grant funds for tuition, fees, and room and board charges. Permission is required to use the post-withdrawal grant disbursement for all other College charges. Students will be notified of post-withdrawal disbursement eligibility within 30 days of the date of withdrawal determination.

The College will return the Title IV funds within 45 days of the date it determines the student withdrew. Title IV funds will be returned to the Department of Education in the following order:

1. Unsubsidized Federal Stafford Loan
2. Subsidized Federal Stafford Loan
3. Federal Parent (PLUS) Loan
4. Federal Pell Grant
5. Federal Supplemental Opportunity Grant
6. Other Title IV Assistance
7. Other state
8. Private and Institutional Aid
9. Student

MERIT SCHOLARSHIPS

Canisius College funds renewable scholarships for incoming freshmen which range from \$11,000 to \$23,000 per academic year. Among the scholarships awarded are the Ignatian Scholarships, the Trustee's Scholarships, the Dean's Academic Scholarships, and the Benefactor's Scholarships.

These scholarships are awarded on the basis of SAT or ACT scores and high school records. A separate scholarship application is not required. In order to be eligible for one of these scholarships, a student must:

1. Be accepted for admission to Canisius; and
2. Take the SAT or ACT tests. (Scores for tests taken before December 31 of the senior year are preferred)

Freshmen who are offered these scholarships are required to maintain a 2.0 cumulative GPA at the college to retain their scholarship aid. Ignatian

Scholarship recipients must maintain a 3.0 cumulative GPA. All applicants are encouraged to apply for financial aid.

MARTIN LUTHER KING SCHOLARSHIPS

The purpose of the Martin Luther King Scholarship Program is to provide assistance to students who aspire to the goals of Dr. Martin Luther King. Recipients are awarded for \$1,000 per year for 4 years of full-time study. Applicants must be accepted for admissions and submit a separate application, essay and letters of recommendation by the deadline.

JESUIT SCHOLARSHIP

Incoming freshmen graduating from a Jesuit high school are eligible for \$1,000 per year for four years.

OTHER PROGRAMS

Higher Education Opportunity Program

The Higher Education Opportunity Program (HEOP) is a New York State education program. The purpose of this program is to assist academically under-prepared and financially disadvantaged students. In order to qualify, students must meet specific criteria in each of these areas.

Children of Alumni

Full-time undergraduate students who are children of Canisius alumni are eligible for an alumni grant of \$1000 per year for four years.

Army ROTC Scholarship Program

The purpose of the Army ROTC Scholarship Program is to assist outstanding students in paying for their college education while they complete requirements for a commission in the U.S. Army Reserves, the National Guard, or the United States Army. High school students interested in the four-year scholarship should contact their high school guidance counselors or the Professor of Military Science at Canisius College. Students may also apply on the Internet at www.armyrotc.com. The application deadline is January 10 of the student's senior year in high school.

Three- and two-year scholarships are also available to Canisius College students. It is not necessary that a student be enrolled in the Military Science curriculum to qualify for these scholarship awards. The application window for returning students begins June 12 and closes January 10.

The scholarship covers tuition and mandatory fees. All qualifying students will also receive a flat rate of \$600 for books, and a subsistence allowance of up to \$500 per month for the length of the scholarship.

Canisius College also provides a grant to assist resident ROTC Scholarship recipients with their room and board costs.

ENDOWED SCHOLARSHIPS

Endowed scholarships are permanently invested funds that provide a perpetual source of scholarship assistance to deserving students. These are made possible by founded gifts, which yield an annual income sufficient to defray, in whole or in part, the tuition and fees of the student.

The annual income from endowed scholarships partially finances the scholarship program of Canisius College according to the wishes of the donors.

EDUCATION LOANS

A loan is money the student borrows. It must be paid back. A loan is a serious obligation. Students should borrow only what they need. Education loans are for tuition and fees, room and board, books, transportation and personal expenses.

An education loan cannot exceed the student's total educational costs minus other student financial aid and, if required, a family contribution. Education loans have lower interest rates than most other types of loans.

The Federal Family Education Loan Program (FFELP) loans offered at Canisius College include:

- Federal Direct Student Loans (subsidized & unsubsidized)
- Federal Parent Loans for Students (Federal PLUS)

Federal Direct Student Loans

Federal Direct Student Loans are available to undergraduate students with demonstrated financial need. The maximum loan amounts available to undergraduates are as follows:

First Year	\$3,500 each year
Second Year	\$4,500 each year
Third, Fourth & Fifth Years +	\$5,500 each year

Note: In addition, students may borrow an additional \$2,000 in unsubsidized loan funds each year. Students are required to pay interest on this loan while they are attending school.

The total undergraduate Federal Direct amount (both subsidized and unsubsidized combined) cannot exceed \$31,000.

Independent undergraduates may borrow up to an additional \$4000 for their first and second years and \$5000 for their third, fourth, and if necessary fifth year of study through the Federal Direct Unsubsidized Loan Program. Students are required to pay interest on this loan while they are in school. The total undergraduate Federal Direct Loan amount for independent students (both subsidized and unsubsidized) cannot exceed \$57,500.

Beginning July 1, 2013, first-time borrowers will be eligible for subsidized direct loans for a maximum of 150% of the publicized length of their program. For example: A student enrolled in a four-year program may receive subsidized direct loans for a maximum of six years. This limitation is not imposed on unsubsidized or PLUS loans. Aggregate limits still apply.

How to Get a Loan

Three factors must be considered to determine Federal Direct Loan eligibility: educational costs, other financial aid the student will receive, and the expected family contribution as determined through an approved needs-analysis system. Therefore, all students must submit a FAFSA before the Federal Direct Loan can be processed. A loan is usually for a single academic year. An online entrance interview must be completed before the loan is disbursed. Prior to graduation or withdrawal, the student must complete an online exit interview. The purpose of these interviews is to explain the rights and responsibilities, including repayment obligations.

The school must report these figures to the federal loan processor and certify the student's enrollment status. Borrowers are required to complete an electronic Master Promissory Note (e-MPN). Information about the

e-MPN and instructions for submission may be accessed at the Federal Student Aid website (<https://www.studentloans.gov>).

Paying Back a Loan

The student is responsible for:

1. Repayment of the amount borrowed;
2. Interest on the amount borrowed;
3. Fees paid at the time he/she receives the loan check.

When a student gets a loan, the terms of repayment are explained. Students must be sure that they understand all repayment terms before signing the loan's promissory note. If the student fails to meet these terms, he/she is in default and the entire balance of the loan becomes due.

Costs

The interest rate for all Federal Direct Loans on which the first disbursement is made on or after July 1, 2006 (regardless of any previous loan history) will be the current fixed rate. For subsidized loans, there are no interest payments while the student is in school. Students who borrow through the unsubsidized Federal Direct Loan must begin to pay the interest while in school. An origination fee of 1.068 percent of the amount borrowed may be charged. The fees are removed from the loan amount at the time the loan is issued.

Federal Direct Parent Loans for Undergraduate Students (Federal Direct Plus)

These loans are for parents of financially dependent undergraduate students. Parents may borrow up to the cost of attendance minus financial aid per year per child. A student should apply for a Federal Direct Loan before the parent applies for Federal Direct PLUS. PLUS Loans may be applied for at www.studentloans.gov.

Costs

The interest rate for PLUS loans on which the first disbursement is made on or after July 1, 2006 will be the current fixed rate. Interest begins at the time of disbursement. An origination fee of up to 4.272 percent of the amount borrowed. The fees are removed from the loan amount at the time that the loan is issued.

Repayment

Repayment of the amount borrowed plus interest begins 60 days after the loan is fully disbursed. The minimum monthly payment is \$50. Repayment must be completed within 5-10 years depending on how much the parent borrowed. Interest accrues immediately and repayment begins within 60 days of disbursement. However, parents may request an in-school deferment from the federal government if they wish. Repayment would then begin at graduation or separation from school.

OTHER FINANCING OPTIONS

The following options are available to assist students and their parents in financing a Canisius education:

1. **Griffin Tuition Payment Plan:** This plan allows parents to budget tuition payments over a full academic year. A semesterly fee of \$50 is charged. Further information is available at the Student Records and Financial Services Center.

2. **Canisius College Installment Payment Plan:** A student who is unable to pay his/her semester bill in full by the due date may pay the balance in monthly

payments by signing a two-payment installment plan. Installment plans are subject to an administrative fee of \$50. A 5 percent penalty fee on the total unpaid balance will be added if the plan remains unpaid after the due date.

FINANCIAL AID CHECK LIST

To be evaluated for possible financial aid, the student must submit the following forms each academic year:

1. Free Application for Federal Student Aid (FAFSA) and a TAP application. The FAFSA is available online at www.fafsa.gov. The TAP application is available to New York State residents as a direct link when they file the FAFSA online or by visiting Anytime TAP at www.hesc.ny.gov.
2. If requested, Federal Income Tax 1040 Form transcripts (parents and student) for the previous calendar year when necessary or other requested verification of income including child support. These items should be returned to the Student Records and Financial Services Center. Students are reminded that financial aid awarded for the freshman year or any other year does not guarantee aid for the following year. Students must re-apply for financial assistance each year.

Financial Assistance Information for Students

Section 485 of the Education Amendments of 1998 legislates that institutions participating in Title IV Student Aid Programs shall provide prospective and enrolled students with information about student aid at their respective institutions.

Canisius College has a Student Financial Aid Policy and Procedures Manual which is updated periodically. This manual describes the following:

1. Institutional, federal, and state student aid programs available at Canisius;
2. Procedures for awarding student aid at Canisius;
3. Application processes and deadline dates for the various student aid programs;
4. Student rights and responsibilities under the appropriate student aid programs;
5. Appropriate budgets, outlining an estimated cost of attendance, which includes tuition, fees, books and supplies, room and board on campus and other related costs;
6. Institutional refund policy; and
7. Academic standards needed to retain financial eligibility.

The Student Records and Financial Services Center (Bagen 106) will provide the above financial aid information upon request. Information pertaining to academic programs, special services available to the handicapped and institutional accreditation is explained elsewhere in the college catalog.

SATISFACTORY ACADEMIC STANDING

To receive student financial aid, a student must remain “in Good Academic Standing.” This means that students must:

1. make satisfactory academic progress toward the completion of their program requirements and
2. pursue the program of study in which they are enrolled

The two elements of program pursuit and satisfactory academic progress must be met for each term of study in which an award is received.

Note: Satisfactory Progress

A student must acquire a minimum number of credits at each semester interval and a minimum cumulative GPA. Students must meet the following satisfactory progress standards based on a 4.0 grading system:

Undergraduate #1

Applies to students first receiving aid in 2007-08 through 2009-10 and HEOP students first receiving aid in 2007-08 and thereafter.

Before being certified for aid for this semester:	A student must have accrued at least this many graded credits:	With at least this Cumulative Quality Point Average:
1st	0	0
2nd	3	1.1
3rd	9	1.2
4th	21	1.3
5th	33	2.0
6th	45	2.0
7th	60	2.0
8th	75	2.0
9th	90	2.0
10th	105	2.0

For example: Student A has accumulated 18 hours and has a 1.2 GPA. She is entering her fourth semester and fourth payment of aid and needs 21 hours and a 1.3 GPA. She is ineligible for New York State student aid because she does not meet the satisfactory progress requirements.

Undergraduate #2

Applies to students first receiving aid in 2010-11 and thereafter (with the exception of HEOP students)

Before being certified for aid for this semester:	A student must have accrued at least this many graded credits:	With at least this Cumulative Quality Point Average:
1st	0	0
2nd	6	1.5
3rd	15	1.8
4th	27	1.8
5th	39	2.0
6th	51	2.0
7th	66	2.0
8th	81	2.0
9th	96	2.0
10th	111	2.0

For example: Student B has accumulated 18 credit hours and has a 2.0 GPA. He is entering his third semester of school and his third payment of aid. At this point, he needed nine hours and a 1.2 to maintain satisfactory progress. However, during his second semester, he completed only three credit hours. Consequently, he did not maintain the program pursuit aspect and is ineligible for his third payment.

Program Pursuit

This requirement applies to all undergraduate students regardless of which Satisfactory Academic Progress Chart they must follow.

A student must receive a passing or failing grade in a certain percentage of a full-time course load. The percentage increases from 50 percent of the minimum full-time load in each semester of study in the first year for which an award is made, to 75 percent of the minimum full-time load in each term of study in the second year for which an award is made, to 100 percent of the minimum full-time load in each term of study in the third and each succeeding year for which an award is made. Grades of W (indicating a student's withdrawal from a course) do not satisfy Program Pursuit requirements. Full-time students must meet the following requirements for Program Pursuit:

Undergraduate

Before being certified for aid for this semester:	Minimum credit hours a student must have completed in the previous semester to meet Program Pursuit requirement:
1st	0
2nd	6
3rd	6
4th	9
5th	9
6th	12
7th	12
8th	12
9th	12
10th	12

For example: Student B has accumulated 18 credit hours and has a 2.0 GPA. He is entering his third semester of school and his third payment of aid. At this point, he needed nine hours and a 1.2 to maintain satisfactory progress. However, during his second semester, he completed only three credit hours. Consequently, he did not maintain the program pursuit aspect and is ineligible for his third payment.

Waivers

If a student fails to maintain program pursuit, fails to make satisfactory progress, or fails to meet both of these elements of good standing, the college may grant a waiver which would allow the student to receive financial aid for the next semester. A maximum of one waiver at the undergraduate level and one at the graduate level may be awarded to a student. The waiver will not be automatic since it is intended to accommodate only extraordinary cases. Waiver policies are somewhat different for aid received under federal Title IV programs and aid received under New York State programs.

Federal Programs

Each student's progress will be evaluated every semester. Students will be required to meet the academic standards as outlined in the college catalog.

However, Canisius College will allow all students a one-time warning following their first adverse determination of satisfactory progress. During this warning period, the students still will be considered to be maintaining satisfactory progress and are eligible for federal Title IV funds. "The fact that a student was placed on warning must be made a part of his or her record." (Source: official Federal Regulations.) A one-time warning period is defined as one academic semester.

Students not meeting satisfactory academic progress or program pursuit requirements will be placed on financial aid warning status for the ensuing

semester of the student's enrollment. Students will be allowed to retain their financial aid during the warning semester.

Financial aid suspension will occur following the semester of warning if the student fails to meet the required academic standards. Reinstatement of aid will occur when the minimum standards have again been earned. Students may use summer classes (at their own expense) to increase their GPA and/or their total credits earned sufficiently to reinstate their eligibility for financial aid. However, courses taken in the summer will not resolve a student's unsatisfactory pursuit. Only courses taken at Canisius College will affect a student's GPA. Students must complete the requirements for a degree within 150 percent of the normal time allotted for program completion or within a maximum of six years. The following aid programs are subject to the conditions described above:

- Federal Pell Grant
- Federal Perkins Loan
- Federal Teacher Education Assistance for College and Higher Education (TEACH) Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Work Study (FWS)
- Federal Direct Student Loans (subsidized and unsubsidized)
- Federal Parent Loan for Undergraduate Students (Federal PLUS)

New York State Programs

A waiver will be granted if situations beyond a student's control prevent the student from maintaining satisfactory academic progress or program pursuit. These situations must be documented. The waiver will be granted only when there is reasonable expectation that the student will be able to meet the successive steps for financial aid eligibility as specified in the tables above. Reasons for which waivers may be granted include:

1. personal medical problems;
2. family medical problems;
3. severe personal problems; and
4. other circumstances beyond the control of the student.

Any student wishing to request a waiver must submit to the associate dean of his/her division a written statement detailing the reasons why special consideration should be given. (A statement simply requesting a waiver is insufficient.)

The written statement must be postmarked no later than ten calendar days after the date of the notice of loss of financial aid eligibility. Documentation supporting the stated reasons for special consideration must be provided and should be included with the written statement or should be forthcoming from appropriate third parties or agencies. The student is responsible for requesting that all documentation be sent or brought to the associate dean. Documentation should indicate that the student's problems have been directly responsible for his or her inability to meet the satisfactory progress and/or program pursuit requirements.

The appropriate associate dean will review the student's written statement and supporting documentation. If additional information is needed, the associate dean may require an appointment with the student. A student will be informed of the associate dean's decision within seven calendar days of receipt of the student's written request. The associate dean will confer with any student being granted a waiver to ensure that the student is fully aware of his/her situation and that the student concurs with the granting of the waiver. The associate dean's decision on the waiver request is final.

Award programs affected by this policy at Canisius College include the following student aid programs:

- Empire State Scholarship for Excellence;
- Tuition Assistance Program (TAP) Aid to Part-Time Students (APTS);
- Children of Deceased and Disabled Veterans (CV) Award, Children of Deceased State Correction Officers, State Civilian Employees of a Correction Facility (AT), and Fire Fighter Award;
- Higher Education Opportunity Program (HEOP);
- Vietnam Veterans Tuition Award.

Reinstatement of Canisius' own institutional aid rests with the discretion of the Student Financial Aid Committee.

Part-Time Students

Part-time students may receive financial aid for up to twelve years, except when certain program limits have been reached. During each academic year of attendance as a part-time student, the student must maintain a cumulative quality point average comparable to that required of a full-time student, along with a comparable number of credits accumulated toward a degree.

Summer School

Students who lose eligibility for financial aid at the end of an academic year can sometimes make up the deficiency by attending summer school at their own expense. The Student Records and Financial Services Center should be consulted regarding the student's intention to do so and should be supplied with a transcript of grades after the completion of courses. Only courses taken at Canisius will affect a student's grade point average. Summer courses will not resolve a student's unsatisfactory pursuit.

Tuition & Fees

GENERAL REGULATIONS

Note: The information in this section is valid only for the academic year May 2016 through May 2017. For the most up-to-date numbers please visit the Canisius tuition and aid webpage (<https://www.canisius.edu/tuition-aid>).

All tuition charges, student fees, and room and board charges are assessed and collected by the Student Records and Financial Services Center, with the exception of the deposit fee for new students that is collected by the Office of Admissions. The Trustees of the college, when necessary, may amend the tuition charges, fees and room and board charges.

TUITION DEPOSITS

All candidates for undergraduate admission must make a pre-registration deposit of \$200 on or before Candidate's Reply Date of May 1. This deposit will be applied to the tuition bill of the first semester after the formal notice of acceptance. The entire deposit is forfeited if the student fails to enter the college or withdraws from the college before the completion of the semester.

ROOM DEPOSITS

A \$200 deposit is required of first time students occupying a room in one of the residence halls. The room deposit is non-refundable and is applied as a credit toward the spring semester room rental charge.

PAYMENT OF TUITION, FEES AND ROOM AND BOARD

Tuition, fees, room and board are due on the date printed on the bill.

Students must either:

- Pay the bill in full less NYS awards.
- Be enrolled in a payment plan.

Failure to do this by the close of business on the due date printed on the bill will result in a \$100 Late Fee assessed monthly (max. \$300). The Student Records and Financial Services Center is responsible for the assessment and collection of tuition and fees payable to Canisius College. All prior financial obligations to the College must be paid in full before registration will be permitted for any new semester. If payment or other arrangements are not made, the Student Records and Financial Services Center has the option of canceling the student's registration.

Canisius College accepts for payment cash, check (US funds only), money orders, wire transfers, and checks over the telephone. Tuition payments can be made online with your checking or savings account. It is the college policy to write the student's ID number on the face of the check or money order to ensure accurate posting. By submitting a check, please be aware that you are authorizing Canisius College to use information on your check to make a one-time electronic debit from your account at the financial institution indicated on your check. This electronic debit will be for the amount on the check. Funds may be withdrawn from your account as soon as the same day your payment is received and you will not receive your check back from your financial institution. Contact the Student Records and Financial Services Center if you have any questions about electronic check collection or options available if you do not want your payments collected electronically.

Checks for tuition payments should be mailed to:

Canisius College
Student Records and Financial Services Center
2001 Main Street
Buffalo, NY 14208

Make your check payable to Canisius College. Your student ID number must be clearly written on the check so that your tuition account is properly credited. All payments are credited on the day received.

Students personally guarantee and are responsible for all obligations to the college for tuition, fees and other charges. Students under the age of majority, under 18 in New York State, have by assumption received the personal guarantee of their parent(s) or guardian unless the student, the parent(s), or guardian notifies the college in writing of their invalidation of the personal and parental assumption of guarantee of all tuition, fees and other charges.

Any student who has an outstanding balance due the college is officially given notice that the college will withhold granting degrees and issuing grades, and discontinues the release of official transcript and academic records until all balances are paid in full. These students will also be subject to additional collection costs, attorneys' fees, late fees, fines or interest charges on the unpaid balance. Failure to receive a bill in the mail is not sufficient grounds to appeal college policy. It is the responsibility of the student to check their account balance online and remit timely payment.

Students participating in a tuition remission, exchange, or consortium program are responsible for various charges and fees. Please consult your academic associate dean or financial aid specialist.

WITHDRAWAL, CANCELLATION AND REFUND

Unofficial withdrawal does not cancel an account. No withdrawal credit will be given to any student who does not fill out the proper withdrawal forms provided by the appropriate associate academic dean. No withdrawals will be accepted or withdrawal credit given over the telephone. Withdrawal credit or refunds of tuition will be given to those students whose bills are paid, or who have signed a Semester Payment Plan on or before the due date specified on the bill.

No refund of tuition, housing or board costs may be demanded as a matter of right when a student leaves the college or college owned housing without completing the semester in which enrolled. For a student to request a refund, the withdrawal must be authorized by the appropriate associate academic dean and/or the Director of Residence Life or designee by the filing of an official form, countersigned by the parent or guardian in the case of a freshman. If this is done, the student may request in writing a refund of tuition, housing, and/or board costs only according to the following schedule:

First week of classes (Drop-and-Add Week)	100%
Second week of classes	90%
Third and fourth week of classes	50%
Fifth week through eighth week of classes	25%
After eighth week of classes	None

Fees are not refundable.

No refund of tuition will be granted to a full-time undergraduate student who withdraws from a course but continues attendance in other courses at the college, with the exception of drop-and-add week. Such students will be deemed to retain full-time status. Refunds of tuition will be calculated from the date on which the withdrawal is approved by the appropriate academic dean. The refund will be sent to the student within thirty days of approval. Full tuition and fees will be refunded in the event of cancellation of a student's enrollment because of an error on the part of the college. Any individual remaining enrolled may terminate the room and board agreement only under special circumstances approved by the Office of Student Life. The same schedules noted above will be used to determine the final bill for housing costs, as specified in the Room and Board Contract.

OUTSTANDING FINANCIAL OBLIGATIONS

Any outstanding financial obligation which a student owes to the college can prevent the student from registering for courses or making schedule adjustments after registration.

The following types of outstanding financial obligations can cause a financial hold to be placed on a student's record and stop registration transactions:

1. Any outstanding tuition, default on payment plans, late charges, write-offs or delinquent NDSL/Perkins loans and Peter Canisius loans;
2. Library – any late fines or replacement fees for books not returned;
3. Residence Life residence hall damage fees;
4. Koessler Athletic Center fees for lost or damaged equipment.

In order to clear a financial hold, a student must pay the obligation due at the appropriate office or make suitable payment arrangements with that office. A student must clear ALL financial holds in order to register for

classes, make schedule changes, receive or send transcripts or view their transcripts online.

GOVERNMENTAL PROGRAMS

Students who attend Canisius College under the provision of Public Laws 16, 346, 550, or 894 and those under the sponsorship and benefits of other government agencies are subject to regulations governing certified papers from the Department of Veterans Affairs or other appropriate government agencies. They must present these papers to the Student Records and Financial Services Center.

DEFERRED TUITION PAYMENTS

Students desiring a tuition deferment or monthly installments in paying their tuition may enter into a Semester Payment Plan with the college. If a student wishes to utilize the Semester Payment Plan, he/she must enroll in the plan by the due date on the bill. All Semester Payment Plans are subject to an administration fee and a penalty fee if the balance is not paid in full by the payment plan's final due date. Once enrolled in a Semester Payment Plan, the administration fee will be added to the tuition bill and the remaining balance is due in accordance with the terms of the agreed upon plan.

FULL-TIME STUDENTS

A full-time undergraduate student is one who is registered for at least 12 credit hours in a semester.

PART-TIME STUDENTS

A part-time undergraduate student is one who is registered for less than 12 credit hours in a semester.

UNDERGRADUATE TUITION FOR FALL AND SPRING SEMESTERS

Effective May 2016 through May 2017

Tuition	Per Semester	Per Year
Tuition for Undergraduate Students in All Curricula		
Full-time students (12-18 credit hours)	\$16,974	\$33,948
Part-time students	\$970.00/ credit hour	
Undergraduate courses in excess of semester hours allotted to each curriculum	\$970.00/ credit hour	
Tuition for Auditing Courses		
Audit	\$485.00/ credit hour	
Audit by Alumni & Parents of Students ^{1,2}	\$60/course	
Audit by Senior Citizens (no course limit) ^{1,2}	\$50.00/ semester	

¹ On a space-available basis.

² No fees, except for laboratory, are charged.

HOUSING RATES

Room Rates	Per Semester	Per Year
Bosch/Frisch – Double	\$3,825.00	\$7,650.00
Bosch/Frisch – Suite	\$4,306.00	\$8,612.00
Bosch/Frisch Corner Suite	\$4,400.00	\$8,800.00
Delavan Townhouses 2 & 3 person	\$5,045.00	\$10,090.00
Delavan Townhouses 4 & 5 person	\$4,666.00	\$9,332.00
Dugan Single	\$4,800.00	\$9,600.00
Dugan – Suite	\$4,443.00	\$8,886.00
Village Townhouses	\$4,666.00	\$9,332.00

MEAL PLAN OPTIONS ¹

Board Rates	Per Semester	Per Year
Griffin A: 17 meals/week, \$175 Griff Bucks, \$25 Griff Choice	\$2,686.00	\$5,372.00
Griffin B: 225 meal blocks, \$275 Griff Bucks, \$25 Griff Choice	\$2,686.00	\$5,372.00
Griffin C: 200 meal blocks, \$375 Griff Bucks, \$25 Griff Choice	\$2,868.00	\$5,372.00
Ultimate Block: 175 meal blocks, \$350 Griff Bucks, \$25 Griff Choice	\$2,514.00	\$5,028.00
Supreme Block: 105 meal blocks, \$450 Griff Bucks, \$25 Griff Choice	\$2,115.00	\$4,230.00
Mega Block: 75 meal blocks, \$550 Griff Bucks, \$25 Griff Choice	\$1,821.00	\$3,642.00
Super Griff Bucks: 4 meal blocks, \$650 Griff Bucks & \$25 Griff Choice	\$675.00	\$1,350.00
Griff Bucks only (minimum deposit) (increase in \$25 increments)	\$25.00	
Griff Choice (minimum deposit)	\$5.00	

¹ A detailed description of each plan may be obtained from the Student Records & Financial Services Center. Freshmen in Bosch, Frisch, or Dugan must be on Griffin A, B, or C. Upperclassmen in Bosch, Frisch or Dugan must be on at least the Mega Block Plan. Resident students not in Bosch, Frisch or Dugan, and commuter students, may choose any meal plan option. If a meal plan is purchased in the fall semester, it will automatically be re-billed in the spring semester, unless changed during the first week of the spring semester.

FEES FOR ALL UNDERGRADUATE STUDENTS

Student Activity Fee (provides partial support for various student activities including the NFTA CRAMPass)

Full-time students	\$212.00/semester
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Part-time students	\$18.00/credit hour
College Fee (including library, facilities use, and ID card)	
Full-time students	\$283.50/semester
Part-time students	\$13.00/credit hour
Technology Fee	
Full-time students	\$112.50/semester
Part-time students	\$7.50/credit hour
Wellness Fee	
Full-time students	\$130.00/semester
Part-time students	\$65.00/semester

SPECIAL FEES

Certain courses require additional fees that are associated with equipment, supplies, or specific activities within those courses. Some standard fees are listed below, although additional classes may also have fees associated with them (including travel).

Non-Collegiate Learning Assessment Program (NLAP) LLL 499	\$200.00
Portfolio Assessor Fee	\$100.00
EDU 122 Portfolio (covers 4 years)	\$105.00
Laboratory and Course Fees (per course)	
Athletic Training Laboratories	\$20.00
ACC 211	\$30.00
Biology Laboratories	\$65.00
Chemistry Laboratories (including breakage allowance)	\$65.00
Education	\$20.00
Modern Language	\$25.00
Physics Laboratories	\$60.00
Psychology	\$20.00
Electronic Course Usage (where required, course of workbook is extra)	\$225.00

OCCASIONAL FEES AND CHARGES

Application Fee	\$40.00
Diploma Reprint Fee	\$30.00
Orientation Fee for All New Full-time Undergraduate Freshman Students	\$275.00
Orientation Fee for All Undergraduate Transfer Students	\$175.00
Late Payment Fee	\$100.00 monthly (\$300.00 max)
ID Card Late or Replacement Fee	\$20.00
Returned Check Charges	\$25.00
Parking Permit Fee	\$35.00 - \$120.00
Transcript of Records	N/C
Thesis Binding Fee	varies
Consortium Administration Fee	\$350/semester
Tuition Remission and Exchange Program	varies
Study Abroad - Canisius Program	\$500.00

Study Abroad - Non-Canisius Program	\$750.00
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ACADEMICS

- Curricular Information (p. 29)
- Academic Policies (p. 59)
- Student Records (p. 65)
- Advisement (p. 70)
- Griff Center for Academic Engagement (p. 70)
- Honors and Awards (p. 72)

Curricular Information

SUMMARY OF CURRICULUM FOR ALL UNDERGRADUATE STUDENTS

All undergraduate students must complete:

1. Either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42);
2. Major Requirements (see individual major requirements using the Undergraduate Majors A-Z (<http://catalog.canisius.edu/undergraduate/majors>) listing); and
3. Electives (sufficient courses and credits to reach the minimum of 120 credits to graduate)

To determine how your courses fulfill curricular requirements you should run a GriffAudit. To run a GriffAudit go to the Canisius website (<http://www.canisius.edu>) and logon to myCanisius. Under "Online Tools," click on "Email, D2L, & Services." On the "Schedule and Registration" menu, click on select "Run My GriffAudit." If you have difficulty with this process or with the information, you should consult your advisor or someone in the GriffCenter.

CREDIT POLICY

A bachelor's degree requires the completion of a minimum of 120 credits. The number of actual courses and credits varies depending upon the particular program as described in this catalog. All Canisius credits, regardless of the number of credits earned for a course, count toward the fulfillment of the 120 total. In practice this means that students may combine one credit courses to make the equivalent of a three-credit free elective. A student may also combine unrelated laboratory credits to make free electives if that student has changed from a science to a non-science major. Any questions about the award of credits and their application to a degree can be directed to the Student Records and Financial Services Center or to an academic advisor.

To earn a degree of associate of arts, a student must complete the required Core Curriculum courses, major courses, elective courses and a minimum of 60 credit hours.

ATTENDANCE

Students are expected to attend all regularly scheduled classes, labs, and other course-related activities. Students are expected to accept personal responsibility for absences and are responsible for fulfilling all requirements and completing assignments in each course. However, on some occasions students may need to be absent. When possible, students should inform their instructors if they plan to be absent from class. Instructors are privileged to establish reasonable absence regulations, which should be clearly stated in the syllabus. The instructor is expected to determine when the number of

absences has reached the level where any additional absences would prevent the student from attaining the objectives of the course.

WRITING

Writing is a way of learning as well as a way of communicating. The development of skill and fluency in the written use of language is inseparable from the development of skill and fluency in thought. As part of their learning experiences, students should expect to write in a variety of modes, from class notes, diaries and poems to examination essays and research papers. Opportunities for writing are a feature of every course in the college. To help develop skill and fluency in writing of various kinds, students may seek assistance from the staff of the Tutoring Center.

EXAMINATIONS

One purpose of examinations is to benefit students. Examinations make more memorable the structure and materials of the course, satisfy the need for definite goals and provide an opportunity to exercise knowledge and skill in the subject. They are experiences in which students can learn about the subject and themselves.

In their syllabi, instructors specify examinations of a kind and number that are, in their judgment, appropriate to the needs of the students and to the objectives and conditions of the course. Normally, a final exam is given in each course during the final exam period. An instructor who wishes to omit the final exam requires prior approval of their department chairperson. No final exams are to be administered during the final week of classes.

ACADEMIC SUPPORT SERVICES

Students whose prior academic record or performance on placement examinations indicates that they will need additional help to succeed in their college work will be placed into special sections or courses that are designed to assist them in their future course of studies. Students may also be advised to take special courses or sections if their performance in the first year indicates such special attention may be helpful. When necessary, the college, working through the Griff Center for Academic Engagement and the various departments, may require that such courses be taken.

Undergraduate Degrees

Canisius College offers undergraduate curricula leading to the degrees of Bachelor of Arts (BA), Bachelor of Science (BS), and Associate of Arts (AA) in the majors and/or concentrations as listed below. Each program is listed with the official approved title and HEGIS number by which it is registered with the New York State Education Department. Enrollment in programs other than those that are registered or otherwise approved may jeopardize a student's eligibility for certain student-aid awards. The programs are as follows:

ARTS AND SCIENCES - ASSOCIATE OF ARTS DEGREE

Humanities	5649.00
Social Sciences	5622.00

ARTS AND SCIENCES — BACHELOR OF ARTS DEGREE

Anthropology	2202.00
Art History	1003.00
Classics	1504.00

Communication Studies	0601.00
Computer Science	0701.00
Creative Writing	1507.00
Criminal Justice	2105.00
Economics	2204.00
English	1501.00
Environmental Studies	2299.00
European Studies	0310.00
French	1102.00
German	1103.00
History	2205.00
Humanities	4903.00
International Relations	2210.00
Latin American Studies	0308.00
Mathematics & Statistics	1701.00
Music	1005.00
Philosophy	1509.00
Political Science	2207.00
Psychology	2001.00
Religious Studies	1510.00
Sociology	2208.00
Spanish	1105.00
Urban Studies	2214.00

ARTS AND SCIENCES – BACHELOR OF SCIENCE DEGREE

Animal Behavior, Ecology and Conservation	0407.00
Biochemistry	0414.00
Bioinformatics	0499.00
Biology	0401.00
Chemistry	1905.00
Clinical Laboratory Science	1223.00
Computer Science	0701.00
Digital Media Arts	0605.00
Environmental Science	0420.00
Journalism	0602.00
Physics	1902.00
Social Sciences-General	2201.00
Specialized Studies	4903.00

EDUCATION AND HUMAN SERVICES – BACHELOR OF ARTS DEGREE

Adolescence Education	0803.00
Biology “7-12”	0401.01
Chemistry “7-12”	1905.01
English “7-12”	1501.01
French “7-12”	1102.01
German “7-12”	1103.01
Mathematics “7-12”	1701.01
Physics “7-12”	1902.01

Social Studies “7-12”	2201.01
Spanish “7-12”	1105.01
Early Childhood Education	0823.00
Early Childhood & Childhood Education	0802.00
Childhood Education	0802.00

EDUCATION AND HUMAN SERVICES – BACHELOR OF SCIENCE DEGREE

Athletic Training	1299.30
Health and Wellness	1299.30
Human Services	2101.00
Physical Education	0835.00
Physical Education/Health Education	0835.00
Physical Education Sport Studies	1299.30
Professional and Technical Studies	4999.00
Special Education/Early Childhood	0808.00
Special Education/Childhood	0808.00
Sport Management	0599.00

WEHLE SCHOOL OF BUSINESS – BACHELOR OF SCIENCE DEGREE

Accounting	0502.00
Professional Accounting (150 hour Program)	0502.00
Accounting Information Systems	0502.00
Business Economics	0517.00
Entrepreneurship	0506.00
Finance	0504.00
Information Systems	0702.00
International Business	0513.00
Management	0506.00
Marketing	0509.00
Operations Research	0507.00

PRE-PROFESSIONAL PROGRAMS

Canisius College offers pre-professional training for students wishing to pursue a graduate degree in a number of professions. More detail is available in the pre-professional programs page (p. 52) of the catalog. Programs and/or concentrations are available in the following areas:

- Pharmacy 2+4¹
- Osteopathic Medicine¹
- Dental Medicine¹
- Pre-Medicine
- Pre-Dentistry
- Pre-Law
- Pre-Veterinary
- Pre-Pharmacy
- Pre-Engineering

¹ Joint Degree Program

UNDERGRADUATE DUAL DEGREE PROGRAMS

Canisius College offers 3+2 Dual Degree Program in Physics and Engineering with the University at Buffalo (UB), and a dual degree program in physics and engineering with Pennsylvania State University at Erie, The Behrend College.

Students begin the program at Canisius and complete three years, or the equivalent, studying liberal arts courses in addition to pre-engineering courses in the basic sciences. Upon completion of the first three years and with a recommendation from Canisius, students then enter University at Buffalo or Pennsylvania State for two years to complete the engineering courses required there, with articulation agreements in place to ensure a smooth transfer process.

Students who complete one of the dual degree programs receive two bachelor's degrees, one from Canisius in physics, and one in an engineering discipline (UB – Chemical, Civil, Electrical, Industrial, Mechanical, Aerospace and Penn State – Mechanical) from the partner school.

DUAL DEGREE PROGRAMS

Canisius College also offers Dual Degree programs in a number of areas. These programs allow for the completion of a bachelor's degree in four years, followed by a master's degree in approximately one year. These programs are as follows:

- A Dual Degree program leading to a Master of Business Administration degree is offered for students majoring in business and a number of majors in the College of Arts and Sciences.
- A Dual Degree program leading to a Master of Business Administration degree in Accounting to students majoring in Accounting. This dual degree program meets the requirement for 150 hours for certification as a NYS CPA (certified public accountant).
- A Dual Degree program leading to a Master of Science degree in Communication and Leadership is offered to students majoring in Human Services

Core Curriculum

CORE CURRICULUM MISSION

The Canisius College Core Curriculum is rooted in the humanistic ideals of the Catholic intellectual tradition and Jesuit pedagogy with its emphases on academic excellence, the dialogue of faith and reason, and service to humanity.

The Core Curriculum seeks to provide Canisius students with a strong foundation in the humanities and liberal arts as the first step in a transformative experience that will expose them to the richness of human diversity and infuse them with a sense of service in the cause of justice for all peoples, but especially for the poor and marginalized of the world.

At the same time, the Core Curriculum seeks to develop student skills in writing, oral communication, information literacy, and critical thinking that are essential for success in life regardless of the profession one chooses to pursue.

Lastly, the Core Curriculum seeks to engage Canisius students with the spiritual dimension of human life in the hope that this will enable them to seek God in all things and to become men and women for and with others in the pursuit of wisdom and magnanimity.

More information about the core is available on the Academic Affairs Website (<https://www.canisius.edu/academics/academic-affairs/core-curriculum>).

CORE CAPSTONE

The Core Curriculum includes a Core Capstone that provides students an opportunity to reflect upon the meaning and significance of the Core Curriculum. Students should ideally take the Core Capstone upon completion of all the other core components, usually in the junior or senior year.

CORE CURRICULUM EXPERIENCES

1. **Foundation Courses: Four courses** – FYS 101, ENG 101, PHI 101, RST 101
Students are encouraged to complete these four foundation courses during their first year and as their major schedules permit. Usually FYS 101 is taken during the fall semester and ENG 101 during the spring semester. First-year students should complete PHI 101 or RST 101 during the fall semester and then the other course during the spring semester.
2. **Breadth of Knowledge: minimum seven courses**
Students take at least seven courses that range over the traditional liberal arts, at least one from each of the following Fields: Religious Studies, Philosophy, Literature and the Arts, History, Social Sciences, Natural Sciences, and Mathematical Sciences. Only courses having the appropriate field-designation satisfy this component of the Core Curriculum.
3. **Cross-disciplinary Knowledge and Skills Courses: courses having the following six designations**
Students also take courses that satisfy the following cross-disciplinary knowledge and skills goals: Justice, Ethics, Diversity, Global Awareness, Advanced Writing-intensive, and Oral Communication. Courses with an appropriate field-designation or courses that satisfy major or elective credits may also have these designations. Students take as many courses as necessary to complete the knowledge and skills goals.
4. **Core Capstone: One designated course or experience**
Ideally after students complete all other Core Curriculum expectations, they become eligible for the Core Capstone. Typically this occurs during a student's junior or senior year. Some Core Capstones might also be capstones in a major (see your major course of study for such overlap).

DESCRIPTIONS OF CORE CURRICULUM COMPONENTS

The Core Curriculum is a multi-disciplinary program of study that all Canisius College students experience. The Core Curriculum components include:

1. **Foundation Courses**
The Core Curriculum provides a foundation of four common courses, usually completed during the first year. These courses include basic instruction in writing (FYS 101, ENG 101), attention to the process of critical thinking through the basic development of information literacy (FYS 101, ENG 101, PHI 101, RST 101), and a basic understanding of the importance of studying religion and philosophy within the Catholic, Jesuit tradition of education (PHI 101, RST 101).
 - **Foundation FYS 101: Explorations of Academic Writing – Special Topics**
This course emphasizes the production of academic writing through critical analysis of texts with topics drawn from a wide range of academic disciplines. These courses are intended to be seminar style with reading and discussion appropriately challenging for first-year students. The motivating goal is that students learn to

write to enhance learning, find and evaluate information, practice academic integrity, negotiate the process of revision, and use correct grammar and syntax.

- **Foundation ENG 101: Writing about Literature**

This course develops strategies for reading and writing about literature — poetry, drama, fiction, literary essays. The motivating goal is that students come to understand and interpret primary literary texts, develop writing skills, and develop and organize interpretive essays through the use and evaluation of sources. ENG 101 courses have a significant component devoted to writing instruction and developing information literacy. Students undertake appropriate research activities, write at least 15 pages of polished prose, and revise their writing exercises.

- **Foundation PHI 101: Introduction to Philosophy**

This course acknowledges the special place of philosophy in Catholic Jesuit education. PHI 101 provides a thoughtful examination of philosophical issues, with concern that students learn to use logical and critical analysis to understand the claims and arguments proposed by classical and modern philosophers, including some in the Catholic philosophical tradition.

- **Foundation RST 101: Introduction to Religious Studies**

This course acknowledges the special place of studying religion in Catholic Jesuit education. RST 101 provides an academic introduction to religion, with a concern that students understand the nature and role of religion and religious experience in human life and society, including the Jesuit and Catholic traditions as well as other world religions.

2. Breadth of Knowledge

The Core Curriculum compasses a distribution of liberal arts and sciences courses, one in each of seven Breadth of Knowledge Fields. These courses provide a broad examination of the liberal arts tradition and invite participants to recognize the multiple ways that natural and social phenomena have been studied and categorized. The skills and knowledge students develop through the Breadth of Knowledge component of the Core Curriculum reflect the variety of disciplinary norms specific to each Field. Taken together these courses encourage students to reflect on their inner lives, to consider how attention to the life of the mind bears upon reality, and to discern the human relationship to the natural world and to social institutions.

The seven Breadth of Knowledge Fields are:

- **Field 1: Religious Studies and Theology**

Field 1 courses enable students to gain a clearer understanding of the role that religion plays in human life through a careful and systematic examination of religious ideas, institutions, values, or patterns of belief and practice.

- **Field 2: Philosophy**

Field 2 courses enable students to understand, articulate, and evaluate the values, principles, and assumptions on which individual and social decisions rest.

- **Field 3: Literature and the Arts**

Field 3 courses enable students to understand the aesthetic dimension of creative work in the fine arts and/or literature and to articulate how that creative work mirrors and shapes human experience.

- **Field 4: History**

Field 4 courses enable students to understand how historians use evidence to study the recorded past, to situate events, artifacts, and experiences in their historical context, and to analyze the process of change over time.

- **Field 5: Social Sciences**

Field 5 courses enable students to explain, interpret, and critically analyze human behavior and social structures from the perspective of the social sciences and their methods.

- **Field 6: Natural Sciences**

Field 6 courses enable students to explain, interpret, and critically analyze the natural world using the scientific method from the perspectives of the various natural sciences.

- **Field 7: Mathematical Sciences**

Field 7 courses enable students to reason quantitatively, abstractly, or computationally about the world using the symbol systems rooted in quantitative measures, logical analysis, and/or algorithms to solve practical problems.

3. Cross-Disciplinary Knowledge and Skills courses

The Core Curriculum provides six focal areas that address matters central to the Catholic, Jesuit tradition of education that are necessary for preparing students for the modern world. Students select courses to fulfill all six experiences. Any course may carry a Cross-Disciplinary Knowledge or Skill designation that has a significant component on the focal area. Such courses may also satisfy Field and major requirements as well as elective credit.

- **Diversity Component**

Courses with a diversity component enable students to develop an understanding of the multicultural character of the United States by giving attention to the cultural differences within the United States. This focal concern is grounded on the assumption that a good education ought to provide students with the intellectual tools and broad perspectives for examining their own communities and values as well as the communities and values of other peoples.

- **Ethics Component**

Courses with an ethics component enable students to develop an understanding of personal action, the good in terms of human agency and happiness and living a worthwhile life. Attention focuses on moral issues, living well and the frameworks that make living well intelligible, both personally and professionally. This focal concern is grounded on the assumption that an understanding of ethics is an integral part of educating the whole person for good citizenship.

- **Global Awareness Component**

Courses with a global awareness component enable students to develop an awareness of nations, countries, regions, communities and cultures outside of the United States. This focal concern is grounded on the assumption that we live in an increasingly interconnected world, and that a liberal arts education ought to provide students the intellectual tools and understandings to comprehend global events.

- **Justice Component**

Courses with a justice component enable students to develop an understanding of the nature of justice, including the tension between justice and power, as well as the causes of injustice. This focal concern is grounded on the assumption that we live in a world that increasingly calls to its citizens to promote justice and that a liberal arts education ought to provide students the intellectual tools and understandings to promote justice.

- **Advanced Writing-intensive Component**

Courses at the 200-level or above with an advanced writing component provide significant emphasis on using writing as a way to learn. The focal concern is that students participate in the process of drafting, re-writing, and editing at an advanced level, with extensive commentary and assistance from instructors.

- **Oral Communication Component**

Courses with an oral communication component enable students to develop abilities to communicate effectively and appropriately in a range of contexts, including face-to-face engagements and through practicing their skills with sending and receiving messages. Effective communication helps maintain a sense of community as well as an ability to craft consensus in an increasingly diverse and complex world. Preparation for life in the modern world requires sensitive and skillful communication with those of widely different backgrounds, cultural experiences, and values.

COURSES IN THE CORE CURRICULUM

Foundations

Students must take each of the following classes:

FYS 101	Explorations of Academic Writing and Special Topics	3
ENG 101	Writing about Literature	3
PHI 101	Introduction to Philosophy	3
RST 101	Introduction to Religious Studies and Theology	3

Field 1 (Religious Studies and Theology)

Students must take one of the following classes:

CLS 308	Pagans and Christians	3
CLS 309	Greek and Roman Religion	3
HIS 302	Life and Theology in Colonial Atlantic	3
HIS 306	American Religious Experience	3
IGSR 300	Immersion East Side Seminar	3
IGSR 302	Jesuits in Argentina	3
PSY 230	Psychology of Religion	3
RST 200	Introduction to the Hebrew Bible	3
RST 201	Introduction to the New Testament	3
RST 219	History of Eastern Orthodox Christianity	3
RST 220	Introduction to Eastern Religions	3
RST 221	Native American Religions	3
RST 222	African Religions	3
RST 224	Islam: Tradition and Revival	3
RST 229	Religious Perspectives on Animals	3
RST 230	Catholic Belief Today	3
RST 231	Introduction to Catholic Studies	3
RST 234	Christians (En) Countering Injustice	3
RST 235	Religion and Politics	3
RST 236	Theology and European Film	3
RST 237	Images of Jesus in Film and Art	3
RST 240	Development of Jewish Religious Thought and Practice	3
RST 242	Introduction to the Spirituality of Business	3
RST 314	New Testament in Literature and Art	3
RST 324	Biblical Archaeology	3
RST 325	Early Christianity	3
RST 327	Modern Global Christianity	3
RST 340	Moral Issues Today	3
RST 341	Catholic Social Ethics: Theological Perspectives	3
RST 342	Theological Ethics and Environmental Justice	3
RST 343	Franciscan Reply to Science	3

RST 345	Bio-Moral Problems	3
RST 353	Seven Signs of Love	3
RST 355	The Problem of Suffering	3
RST 360	Magic, Science and Religion	3
RST 400	Religious Studies and Theology Seminar	3

Field 2 (Philosophy)

Students must take one of the following classes:

CLS 312	The Greek Enlightenment	3
HIS 347	The History of Marxism	3
HIS 348	Twentieth Century Marxism	3
PHI 225	Logic	3
PHI 240	Justice	3
PHI 241	Ethics: Traditions in Moral Reasoning	3
PHI 242	Ethical Issues in Business	3
PHI 243	Bio-Medical Ethics	3
PHI 244	Environmental Ethics	3
PHI 245	Animal Ethics	3
PHI 246	Ethics of Technology	3
PHI 247	Food and Agricultural Ethics	3
PHI 252	Happiness, Virtue and the Good Life	3
PHI 261	Philosophy of Law	3
PHI 264	Justice & the Environment: The Problem of Climate Change	3
PHI 267	Catholic Social Thought	3
PHI 271	Philosophy of Human Rights	3
PHI 272	Gender and Philosophy	3
PHI 273	Race and Philosophy	3
PHI 274	Social and Political Philosophy	3
PHI 285	Black Philosophy	3
PHI 286	Latin American Philosophy	3
PHI 291	Philosophy of Art	3
PHI 292	Philosophy of Beauty	3

Field 3 (Literature and the Arts)

Students must take one of the following classes:

CLS 205	Mirror of the Past: Greece	3
CLS 206	Mirror of the Past: Rome	3
CLS 207	Mythology and Literature	3
CLS 214	Greek and Roman Tragedy	3
CLS 301	The Age of Cicero	3
DMA 201	Introduction to Digital Media	3
DMA 213	3D Graphics	3
DMA 214	Digital Design Concepts	3
DMA 310	Digital Audio/Music Production	3
ENG 147	Acting I	3
ENG 148	Acting II	3
ENG 201	Poetry	3
ENG 202	Drama	3
ENG 211	Science Fiction	3
ENG 213	Word and Image	3
ENG 218	Literature and Medicine	3
ENG 219	Literature and Psychology	3

ENG 220	Contemporary Catholic Fiction	3
ENG 223	Images of Women in Literature and Film	3
ENG 224	The Journey in World Literature	3
ENG 225	The Journey in American Literature	3
ENG 233	The Quest in Medieval Literature	3
ENG 285	Animals in Film and Literature	3
ENG 294	Introduction to Creative Writing	3
ENG 368	Native American Literature	3
ENG 369	Contemporary American Fiction	3
ENG 382	African American Literature	3
ENG 411	Playwriting	3
FAH 101	Cave Paintings, the Colosseum & Cathedrals	3
FAH 102	Altarpieces, Academies & the Avant-Garde	3
FAH 103	Survey of Pre-Columbian and Native American Art	3
FAH 107	Introduction to African and Asian Art	3
FAH 109	History of Architecture	3
FAH 110	History of Photography	3
FAH 159	Gender and Art	3
FAH 210	Ancient Egyptian and Near Eastern Art	3
FAH 213	Greek and Roman Art	3
FAH 224	Medieval Art	3
FAH 245	Renaissance Art	3
FAH 248	Baroque Art	3
FAH 261	Monet and the Age of Impressionism	3
FAH 262	Modern Art	3
FAH 265	Contemporary Art	3
FAH 266	Modern Architecture	3
FAH 267	Frank Lloyd Wright	3
FAH 271	Art in Buffalo	3
FAM 115	Fundamentals of Music	3
FAM 119	Masterpieces of Music	3
FAM 123	World Musics	3
FAM 124	America's Music	3
FAM 212	Canisius and the BPO Experience	3
FAM 213	Women in Music	3
FAM 214	Music in Film	3
FAM 216	Medieval and Renaissance Music	3
FAM 217	Music of the Baroque Period	3
FAM 218	Music of the Classical Period	3
FAM 219	19th Century Music	3
FAM 220	Art Music from 1900 to the Present	3
FAM 221	Opera Workshop I	3
FAM 222	Opera Workshop II	3
FAM 224	Afro-Centric Music	3
FAM 230	Music Theory I	3
FAM 255	Diction for Singers	3
FAS 110	Two-Dimensional Design	3
FAS 120	Drawing I	3
FAS 130	Three-Dimensional Design	3
FAS 131	Sculpture I	3
FAS 140	Introduction to Still Photography	3
FAS 141	Digital Photography	3
FAS 150	Color	3
FAS 160	Printmaking I	3
FAS 170	Studio Painting I	3
FAS 222	Figure Drawing I	3
HIS 387	Representations of the Holocaust in Film, Literature, Art and Music	3

Field 4 (History)

Students must take one of the following classes:

CLS 103	Greek History	3
CLS 104	Roman History	3
EVST 259	Environmental History of the United States	3
HIS 106	The Medieval World	3
HIS 107	History of Modern Europe to 1815	3
HIS 108	History of Modern Europe since 1815	3
HIS 109	History of Asia to 1800	3
HIS 110	History of Asia Since 1800	3
HIS 123	History of the United States: The Colonial Period to Reconstruction	3
HIS 124	History of the United States: 1877 to the Present	3
HIS 125	America's Story I: The Early Years	3
HIS 126	America's Story II: The Later Years	3
HIS 131	Latin American History to 1830	3
HIS 132	Latin American History since 1830	3
HIS 201	United States Military History	3
HIS 203	Castles, Bones and Battleaxes: Material Culture of the Medieval World	3
HIS 204	Soccer in Global History	3
HIS 211	Women In The Western World	3
HIS 212	Men and Ideas in History	3
HIS 213	Twentieth Century Europe	3
HIS 220	The History of Food	3
HIS 226	History of Ireland	3
HIS 229	The Violent Century in Films	3
HIS 230	The Holocaust in Historical Perspective	3
HIS 235	From Jamestown to Yorktown: Making the United States	3
HIS 236	From Washington to Lincoln: The Making of American Democracy	3
HIS 237	The Making of Modern America 1865-1920	3
HIS 251	Sports in America	3
HIS 254	First Peoples	3
HIS 260	Canada and the World	3
HIS 263	Wars of Latin America	3
HIS 280	The Making of Modern Africa	3
PSC 111	Western Political Tradition	3

Field 5 (Social Sciences)

Students must take one of the following classes:

ANT 122	Sociocultural Anthropology	3
ANT 230	Introduction to Archaeology	3
ATH 361	Psychology of Sport and Mental Health	3
CLS 209	Greek and Roman Archaeology	3

CLS 300	Roman Law and Society	3
COM 204	Interpersonal Communication	3
COM 205	Mass Communication and Society	3
COM 304	Family Communication	3
COM 350	Health Communication	3
CRJ 227	Criminal Justice I	3
DMA 215	Digital Media Culture	3
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
EDE 100	Human Growth and Development - Birth through Childhood	3
EDS 101	Human Growth and Social Development: Adolescence	3
EVST 250	Nature, Culture and Interpretation	3
EVST 275	Global Environmental Problems	3
HED 361	Psychology of Sport and Mental Health	3
HSV 301	Social Policies	3
PSC 103	The American Constitution	3
PSC 104	American Political Process	3
PSC 140	International Relations	3
PSC 150	Comparative Government and Politics	3
PSC 224	Congress and the Legislative Process	3
PSC 241	Human Rights and Globalization	3
PSC 242	International Organizations	3
PSC 320	American Constitutional Law I	3
PSC 321	American Constitutional Law II	3
PSC 336	Urban Government and Politics	3
PSC 345	Transnational Crime After 9/11	3
PSC 355	European Union	3
PSC 370	Domestic Conflicts & Peace	3
SOC 110	Introduction to Sociology	3
SOC 111	Contemporary Social Problems	3
SOC 234	Environment and Society	3
SOC 273	Social Movements and Social Change	3
SOC 291	Gender and Society	3
SOC 341	Race and Ethnic Relations	3
SPMT 320	Psychology of Sport	3
WST 201	Introduction to Women and Gender Studies	3

Field 6 (Natural Sciences)

Students must take one of the following classes:

ANT 121	Biological Anthropology	3
BIO 109	Nutrition	3
BIO 111	Introductory Biology I	3
BIO 114	Human Biology: Introduction to Human Anatomy and Physiology	3
BIO 116	Disease: Myth and Reality	3
BIO 120	Biology in the News	3
BIO 125	Microbes and People	3
BIO 131	Biotechnology and Society	3
BIO 132	Genes and People	3
BIO 150	Animal Nutrition	3
BIO 166	Biology of Birds	3

BIO 221	Biology of Women	3
CHM 104	Energy, Environment, and Society	3
CHM 109	General Chemistry I with Review - Part I	3
CHM 111	General Chemistry I	3
CHM 112	General Chemistry II	3-4
EVST 110	Science of Environmental Problems I	3
EVST 111	Science of Environmental Problems II	3
GEO 325	Introduction to Physical Geography	3
GEOL 120	Introductory Geology	3
PHY 129	Introduction to Astronomy	3
PHY 131	Earthquakes: Seismology and Society	3
PHY 133	Dinosaurs	3
PHY 201	College Physics I	3
PHY 223	General Physics for Physical Science Majors I	3

Field 7 (Mathematical Sciences)

Students must take one of the following classes:

ATH 398	Statistics and Research Design	3
CSC 108	Introduction to Web Computing	3
CSC 109	Robotics Introduction to Computer Science	3
CSC 109L	Robotics Introduction to Computer Science Laboratory	1
CSC 111	Introduction to Programming	3
CSC 127	Introduction to Game Design	3
MAT 105	Finite Mathematics	3
MAT 106	Calculus for the Non-Sciences	3
MAT 108	Precalculus for Sciences	3
MAT 109	Calculus with Review I	4
MAT 111	Calculus I	4
MAT 115	Calculus for Business	4
MAT 121	Mathematics through History	3
MAT 131	Statistics for Social Sciences	3
MAT 141	Inferential Statistics and Computers for Science	4
MAT 150	Mathematics and Politics	3
MAT 161	Mathematics for Elementary Teachers	3

Advanced Writing-Intensive

Students must take one of the following classes (note that many of these courses also fulfill one of the Breadth of Knowledge Fields):

ABEC 332	Animal Welfare	3
ABEC 340	Research Methods in Animal Behavior	3
ABEC 360	Observational Research Methods	4
ANT 341	Environmental Anthropology	3
ANT 350	Business Anthropology	3
ANT 355	Sociolinguistics	3
BCH 403L	Molecular Biology Laboratory	1
BIF 400	Bioinformatics Senior Seminar	3
BIO 312	Primatology	3
BIO 404L	Genetics Laboratory	1
CHM 301L	Classical Physical Chemistry Laboratory	1
CLS 301	The Age of Cicero	3
COM 203	Writing for the Public Media	3
CRJ 320	Criminology	3

EDS 223	Foundations of Adolescent Literacy	3
EDU 415	Grammar and Language Study for Teachers	3
ENG 201	Poetry	3
ENG 202	Drama	3
ENG 205	Varieties of the Essay	3
ENG 218	Literature and Medicine	3
ENG 219	Literature and Psychology	3
ENG 223	Images of Women in Literature and Film	3
ENG 224	The Journey in World Literature	3
ENG 225	The Journey in American Literature	3
ENG 233	The Quest in Medieval Literature	3
ENG 285	Animals in Film and Literature	3
ENG 294	Introduction to Creative Writing	3
ENG 383	Research Writing: Process and Product	3
ENG 385	Persuasive Writing	3
ENG 389	Business Communication	3
ENG 411	Playwriting	3
FAH 350	Topics in Art History	3
HIS 299	Historian's Craft	3
HIS 411	History Honors Thesis	3
PED 372	Seminar in Kinesiology	3
PHY 350	Modern Physics Laboratory	1
PHY 449	Nuclear Physics Lab	1
PSC 242	International Organizations	3
PSC 370	Domestic Conflicts & Peace	3
RST 230	Catholic Belief Today	3
RST 231	Introduction to Catholic Studies	3
RST 341	Catholic Social Ethics: Theological Perspectives	3
SPMT 480	Research Methods in Sport	3
ENG 350	The Theater Experience	3
ENT 101	Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation	3
ESL 118	The Art of Oral Presentations	3
FAH 210	Ancient Egyptian and Near Eastern Art	3
FAH 213	Greek and Roman Art	3
FAH 450	Senior Seminar	3
FAM 450	Senior Seminar	3
HIS 125	America's Story I: The Early Years	3
HIS 126	America's Story II: The Later Years	3
HIS 331	British Monarchy	3
MAT 480	Mathematics Seminar	1
MLS 201	Foundations of Leadership	3
MLS 401	Mission Command and the Army Profession	3
MLS 402	Mission Command and the Company Grade Officer	3
PED 441	Teaching Methods in Physical Education	3
PHY 351	Advanced Laboratory	1
PSC 224	Congress and the Legislative Process	3
PSC 355	European Union	3
RST 235	Religion and Politics	3
RST 342	Theological Ethics and Environmental Justice	3
SPE 432	Seminar in Teaching and Assessment	3
SPMT 430	Sport Communications	3

Oral Communication

Students must take one of the following classes (note that many of these courses also fulfill one of the Breadth of Knowledge Fields):

BIO 353	Biology Seminar II	1
CHM 481	Communicating Research Literature	1
CLS 214	Greek and Roman Tragedy	3
CLS 300	Roman Law and Society	3
CLS 309	Greek and Roman Religion	3
COM 201	Oral Communication	3
COM 319	Training and Development	3
CRJ 280	Language for Legal Professions	3
CSC 127	Introduction to Game Design	3
CSC 395	Software Engineering	3
EDE 432	Seminar in Teaching and Assessment	3
EDS 432	Applied Methods of Teaching English: Adolescence	3
EDS 433	Applied Methods of Teaching Mathematics: Adolescence	3
EDS 434	Applied Methods of Teaching Modern Languages: Adolescence	3
EDS 435	Applied Methods of Teaching Science: Adolescence	3
EDS 436	Applied Methods of Teaching Social Studies	3
ENG 147	Acting I	3
ENG 148	Acting II	3

Global Awareness

Students must take one of the following classes (note that many of these courses also fulfill one of the Breadth of Knowledge Fields):

ANT 122	Sociocultural Anthropology	3
ANT 230	Introduction to Archaeology	3
ANT 341	Environmental Anthropology	3
ANT 350	Business Anthropology	3
CLS 103	Greek History	3
CLS 104	Roman History	3
CLS 205	Mirror of the Past: Greece	3
CLS 206	Mirror of the Past: Rome	3
CLS 209	Greek and Roman Archaeology	3
CLS 308	Pagans and Christians	3
CLS 309	Greek and Roman Religion	3
CLS 311	Alexander the Great	3
ECO 460	International Trade	3
ENG 224	The Journey in World Literature	3
ENG 381	Postcolonial Literature	3
FAH 101	Cave Paintings, the Colosseum & Cathedrals	3
FAH 102	Altarpieces, Academies & the Avant-Garde	3
FAH 107	Introduction to African and Asian Art	3
FAH 109	History of Architecture	3
FAH 110	History of Photography	3
FAH 159	Gender and Art	3
FAH 210	Ancient Egyptian and Near Eastern Art	3
FAH 224	Medieval Art	3
FAH 245	Renaissance Art	3
FAH 248	Baroque Art	3
FAH 261	Monet and the Age of Impressionism	3

FAH 262	Modern Art	3	HIS 347	The History of Marxism	3
FAH 265	Contemporary Art	3	HIS 350	America and the Holocaust	3
FAH 266	Modern Architecture	3	IGSR 300	Immersion East Side Seminar	3
FAM 119	Masterpieces of Music	3	IGSR 302	Jesuits in Argentina	3
FAM 123	World Musics	3	IGSR 306	Faith/Justice/Globalism in Phi	3
FAM 212	Canisius and the BPO Experience	3	MAT 150	Mathematics and Politics	3
FAM 216	Medieval and Renaissance Music	3	PHI 240	Justice	3
FAM 217	Music of the Baroque Period	3	PHI 261	Philosophy of Law	3
FAM 218	Music of the Classical Period	3	PHI 264	Justice & the Environment: The Problem of Climate Change	3
FAM 219	19th Century Music	3	PHI 267	Catholic Social Thought	3
FAM 224	Afro-Centric Music	3	PHI 271	Philosophy of Human Rights	3
HIS 106	The Medieval World	3	PHI 272	Gender and Philosophy	3
HIS 107	History of Modern Europe to 1815	3	PHI 273	Race and Philosophy	3
HIS 108	History of Modern Europe since 1815	3	PHI 274	Social and Political Philosophy	3
HIS 109	History of Asia to 1800	3	PHI 286	Latin American Philosophy	3
HIS 110	History of Asia Since 1800	3	PSC 111	Western Political Tradition	3
HIS 131	Latin American History to 1830	3	PSC 320	American Constitutional Law I	3
HIS 132	Latin American History since 1830	3	PSC 321	American Constitutional Law II	3
HIS 211	Women In The Western World	3	RST 234	Christians (En) Countering Injustice	3
HIS 213	Twentieth Century Europe	3	RST 235	Religion and Politics	3
HIS 220	The History of Food	3	RST 341	Catholic Social Ethics: Theological Perspectives	3
HIS 226	History of Ireland	3	RST 353	Seven Signs of Love	3
HIS 260	Canada and the World	3	SOC 273	Social Movements and Social Change	3
HIS 263	Wars of Latin America	3			
HIS 280	The Making of Modern Africa	3			
MAT 121	Mathematics through History	3			
MKT 375	International Marketing	3			
PED 203	Net, Target and Fitness Activities	3			
PED 204	Invasion Games	3			
PHY 131	Earthquakes: Seismology and Society	3			
PSC 140	International Relations	3			
PSC 150	Comparative Government and Politics	3			
PSC 241	Human Rights and Globalization	3			
PSC 242	International Organizations	3			
PSC 345	Transnational Crime After 9/11	3			
PSC 355	European Union	3			
RST 200	Introduction to the Hebrew Bible	3			
RST 219	History of Eastern Orthodox Christianity	3			
RST 220	Introduction to Eastern Religions	3			
RST 222	African Religions	3			
RST 224	Islam: Tradition and Revival	3			
RST 360	Magic, Science and Religion	3			
SPMT 440	Global Perspective in Sport	3			

Justice

Students must take one of the following classes (note that many of these courses also fulfill one of the Breadth of Knowledge Fields):

ABEC 330	Animals, Public Policy, and the Law	3
CLS 300	Roman Law and Society	3
CRJ 280	Language for Legal Professions	3
CRJ 320	Criminology	3
EDU 250	Foundations of Education	3
HIS 201	United States Military History	3

Ethics

Students must take one of the following classes (note that many of these courses also fulfill one of the Breadth of Knowledge Fields):

CLS 207	Mythology and Literature	3
CLS 214	Greek and Roman Tragedy	3
COM 351	Media Ethics	3
CRJ 382	Criminal Justice Ethics	3
CSC 108	Introduction to Web Computing	3
CSC 109L	Robotics Introduction to Computer Science Laboratory	1
HIS 348	Twentieth Century Marxism	3
HIS 387	Representations of the Holocaust in Film, Literature, Art and Music	3
HSV 301	Social Policies	3
PHI 241	Ethics: Traditions in Moral Reasoning	3
PHI 242	Ethical Issues in Business	3
PHI 243	Bio-Medical Ethics	3
PHI 244	Environmental Ethics	3
PHI 245	Animal Ethics	3
PHI 246	Ethics of Technology	3
PHI 247	Food and Agricultural Ethics	3
PHI 252	Happiness, Virtue and the Good Life	3
RST 242	Introduction to the Spirituality of Business	3
RST 340	Moral Issues Today	3
RST 342	Theological Ethics and Environmental Justice	3
RST 343	Franciscan Reply to Science	3
RST 345	Bio-Moral Problems	3

SPMT 302	Sport and Ethics	3
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Diversity

Students must take one of the following classes (note that many of these courses also fulfill one of the Breadth of Knowledge Fields):

ENG 225	The Journey in American Literature	3
ENG 315	American Literature I	3
ENG 339	Southern Literature	3
ENG 368	Native American Literature	3
ENG 382	African American Literature	3
FAH 103	Survey of Pre-Columbian and Native American Art	3
FAM 124	America's Music	3
FAM 213	Women in Music	3
HIS 123	History of the United States: The Colonial Period to Reconstruction	3
HIS 124	History of the United States: 1877 to the Present	3
HIS 125	America's Story I: The Early Years	3
HIS 126	America's Story II: The Later Years	3
HIS 235	From Jamestown to Yorktown: Making the United States	3
HIS 236	From Washington to Lincoln: The Making of American Democracy	3
HIS 237	The Making of Modern America 1865-1920	3
HIS 254	First Peoples	3
PED 354	Adapted Physical Education	3
PED 355	Disability Sports	3
SOC 111	Contemporary Social Problems	3
SPE 341	Inclusive Strategies	3

Core Capstone

Students must take one of the following classes:

ABEC 404	Wildlife Ecology and Conservation in South Africa	3
ABEC 419	Anthrozoology	3
BIO 477	Plants and Society	3
CLL 400	Humanitas	3
COM 414	Issues in Integrated Marketing Communications	3
CSC 320	The Social Impact of Computing	3
DMA 399	Social Documentary	3
DMA 493	Video Institute III	3
DMA 494	Video Institute IV	3
ECCH 494	Capstone Seminar for Teacher Candidates	3
EDE 494	Capstone Seminar for Teacher Candidates	3
EDS 494	Capstone Seminar for Adolescence Education Teacher Candidates	1-3
EDY 494	Capstone Seminar for Teacher Candidates	3
ENG 365	English Core Capstone	3
FAH 481	The Art of the Selfie	3
FAM 390	Sounding Society	3
HIS 414	Black Lives Matter	3
HIS 421	Nature and the Arts of Angling, Restoration, and Contemplation	3
HIS 450	America and the Holocaust	3
HIS 460	The Life and Times of Theodore Roosevelt	3
HIS 470	American Women in History and Literature	3

HSV 480	Wellness - Be All That You Can Be	3
KIN 494	Capstone in Kinesiology	3
MAT 345	Climate and Sustainability	3
PHI 399	Ethics, Justice, & the Problem of Poverty	3
PSC 442	Seminar in International Relations	3
PSC 452	Politics of Identity in Europe	3
PSY 320	Cultural Psychology	3
PSY 365	Psychology of Aging	3
PSY 470	Controversial Issues	3
RST 390	Christian Marriage	3
RST 391	Religious Diversity in Buffalo	3
RST 392	Liberation Theologies	3
RST 393	Catholic Concept of Conscience	3

CORE CURRICULUM LEARNING GOALS AND OBJECTIVES

Courses in the Core Curriculum must meet the following learning goals. Courses may have more learning goals and objectives in addition to those associated with the Core.

Foundations

Foundation FY101: Explore Academic Writing

Content

Goal 1: Read college-level texts pertaining to an academic discipline or topic

Objectives: Students will:

- (1A): recognize the audience and purpose of selected texts within an academic discipline or topic
- (1B): articulate the meaning of text passages within an academic discipline or topic

Skills

Goal 2: Construct a coherent, thesis-driven paper on an academic topic

Objectives: Students will:

- (2A): develop the ability to write a clear introduction that frames the academic topic
- (2B): demonstrate appropriate conventions of grammar and style for formal writing
- (2C): articulate a central thesis around which the paper is to be organized
- (2D): organize the paper effectively with coherent paragraphs
- (2E): support the thesis with evidence
- (2F): conclude the paper appropriately for the topic

Goal 3: Develop basic Information Literacy skills

Objectives: Students will:

- (3A): locate and evaluate print and/or electronic sources appropriate for answering a particular research question
- (3B): cite sources according to a conventional documentation style (for example, MLA, APA, Chicago) and with academic integrity

Foundation ENG 101: Writing about Literature

Content

Goal: Students will demonstrate the ability to understand and critically analyze college-level literary texts.

Objectives: Students will:

- (1A) Understand the use of specific literary terms, traditions, or styles
- (1B) Interpret the meanings or significance of a literary text

Skills

Goal: Students will demonstrate the ability to construct a coherent, thesis-driven essay on a literary topic.

Objectives: Students will

- (2A) Identify and articulate a central thesis around which the essay is to be organized
- (2B) Develop a coherent argument that supports a central thesis
- (2C) Support argument with evidence from literary texts and/or secondary sources
- (2D) Find and evaluate print and electronic sources appropriate for answering a specific research question about a literary text.
- (2E) Cite sources according to MLA documentation style and with academic integrity
- (2F) Demonstrate appropriate conventions of grammar and style

Foundation RST 101: Introduction to Religious Studies

Content

Goal: Students will demonstrate a basic understanding of the nature and role of religion, including Catholic and Jesuit traditions and other world religions.

Objectives: Students will:

- (1A) Demonstrate basic knowledge of Christianity, Judaism & another world religion, as determined by the instructor
- (1B) Identify and explain the basic meaning of Catholic beliefs
- (1C) Identify the key religious terms in the Jesuit tradition

Skills

Goal: Students will demonstrate their knowledge of religious studies or theology in comparative and reflective exercises.

Objectives: Students will:

- (2A) Identify & analyze connections between different religious beliefs
- (2B) Find, use and evaluate information relevant to presenting and defending a thesis
- (2C) Identify and apply the ethical use of academic standards for using sources

Foundation PHI 101: Introduction to Philosophy

Content

Goal: Students will demonstrate knowledge of major figures and major themes within the history of philosophy.

Objectives: Students will:

- (1A) Demonstrate knowledge of at least one *major figure* from three of the four eras in the history of philosophy: Ancient, Medieval, Modern, and Contemporary
- (1B) Demonstrate a basic understanding of some of the major themes in the history of philosophy, from four of the following six areas: Aesthetics, Epistemology, Theories of Ethics, Logic, Metaphysics, and Theories of Justice
- (1C) Demonstrate knowledge of a primary philosophical text from the Catholic tradition or a significant aspect of the Jesuit tradition

Skills

Goal: Students will demonstrate the ability to construct and analyze philosophical arguments.

Objectives: Students will:

- (2A) Construct and explain cogent philosophical arguments
- (2B) Clarify and analyze claims made in philosophical texts

Breadth of Knowledge Fields

Field 1 (Religious Studies and Theology)

Content

Goal: Students will demonstrate knowledge in the disciplines fundamentally concerned with religious studies or theology.

Objectives: Students will:

- (1A) Understand the role of religion in the experiences and actions of human life.
- (1B) Understand religious ideas and religious values in their relationship to religious institutions.
- (1C) Understand the diversity of patterns of religious belief in the human experience.

Skills

Goal: Students will demonstrate the skills that will enable them to become critical thinkers on questions of religious substance.

Objectives: Students will:

- (2A) Demonstrate competence in the use and analysis of primary sources.
- (2B) Demonstrate the ability to understand and explain religious concepts.
- (2C) Demonstrate the ability to relate course subject matter to the human experience.

Field 2 (Philosophy)

Content

Goal: Students will demonstrate a deepened knowledge of a principle theme and a major era or core figure in the history of philosophy.

Objectives: Students will:

- (1A) Demonstrate knowledge of a major topic or branch in the history of philosophy such as Aesthetics, Epistemology, Ethics, Logic, Metaphysics, and Theories of Justice.

- (1B) Demonstrate knowledge of a major era in the history of philosophy (Ancient, Modern, Medieval, or Contemporary) or a core figure in the history of philosophy.

Skills

Goal: Students will demonstrate the ability to communicate and assess philosophical ideas and arguments.

Objectives: Students will:

- (2A) Use philosophical terms and language appropriately in their prose.
- (2B) Identify and analyze assumptions and premises in philosophical arguments.
- (2C) Construct philosophical arguments and write cogently about philosophy.
- (2D) Demonstrate the ability to relate abstract theory to concrete practice.

Field 3 (Literature and the Arts)

Content

Goal: Students will demonstrate an understanding of the aesthetic dimension of human life through the study of literature, art, or music and the ways in which they mirror and shape the human experience.

Objectives: Students will:

- (1A) Identify specific techniques, styles, or formalistic properties of particular examples of literature, art, or music.
- (1B) Identify the relationship of particular examples of literature, art, or music to the traditions from which they have emerged.
- (1C) Demonstrate an understanding of how creative work in literature, art, or music mirrors and shapes human experience.

Skills

Goal: Students will demonstrate knowledge of the methods of literary and artistic criticism and interpretation.

Objectives: Students will:

- (2A) Critically evaluate the methods of literary and/or artistic criticism and interpretation employed in the study of literature, art, or music.
- (2B) Employ the methods of literary and/or artistic criticism and interpretation in the study of literature, art, or music.

Field 4 (History)

Goal: Students will demonstrate familiarity with the way in which historians analyze change and continuity over time with reference to specific historical events, themes, ideas, and/or individuals.

Objectives: Students will:

- (1A) Situate events, people, and/or artifacts in their appropriate historical context.
- (1B) Recognize the relationship between cause and effect in the process of historical change.
- (1C) Read and interpret evidence from primary sources and texts.
- (1D) Read and understand scholarly historical arguments and the way in which they are constructed.

Field 5 (Social Sciences)

Content

Goal: Students will demonstrate knowledge of human behavior from the perspective of a social science discipline.

Objectives: Students will:

- (1A) Demonstrate knowledge of the basic concepts and theories of a social science discipline.
- (1B) Demonstrate knowledge of research methodologies used in a social science discipline.

Skills

Goal: Students will utilize a social science discipline to critically evaluate social, cultural, and/or political claims.

Objectives: Students will:

- (2A) Apply social science concepts and theories to concrete problems of human society.
- (2B) Apply qualitative or quantitative analysis to situations in the world.

Field 6 (Natural Sciences)

Content

Goal: Students will demonstrate through explanations, interpretations, and critical analyses their understanding of natural phenomena.

Objectives: Students will:

- (1A) Demonstrate valid application of cause and effect reasoning.
- (1B) Describe patterns of scale, proportion and quantity in the natural world.
- (1C) Define natural systems in terms of energy, material components and processes of change.

Skills

Goal: Students will demonstrate the ability to reason and communicate so that their actions can have positive impacts on society.

Objectives: Students will:

- (2A) Communicate scientific information effectively.
- (2B) Use qualitative or quantitative data to make rational predictions of natural phenomena.
- (2C) Apply scientific knowledge to issues impacting society.

Field 7 (Mathematical Sciences)

Content

Goal: Students will be conversant with the essential terminology and concepts of a mathematical, statistical or algorithmic system.

Objectives: Students will:

- (1A) Demonstrate knowledge of the vocabulary and notation of a mathematical, statistical or algorithmic system.
- (1B) Demonstrate understanding of the theory behind the concepts and techniques of a mathematical, statistical, or algorithmic system.

Skills

Goal: Students will have the appropriate skills and techniques used in problem analysis and solution.

Objectives: Students will:

- (2A) Analyze and apply appropriate quantitative, theoretical, and/or computational techniques to solve problems.
- (2B) Interpret the results of their analysis clearly.

Attributes

Advanced Writing-Intensive

Content

Goal: Students will demonstrate the ability to write an effectively developed logical argument.

Objectives: Students will:

- (1A) Integrate appropriate ideas and evidence, in accordance with course content.
- (1B) Organize those ideas and that evidence strategically for a given audience and purpose.

Skills

Goal: Students will demonstrate an understanding of appropriate or discipline-specific writing styles, standards, and conventions through a process that includes revision.

Objectives: Students will:

- (2A) Write grammatically correct sentences that are fluid and include smooth transitions.
- (2B) Use vocabulary that is appropriate for the purpose and audience/field.
- (2C) Employ correct punctuation, spelling, capitalization, and documentation conventions.
- (2D) Use appropriate citation and attribution of ideas, information, and evidence.

Oral Communication

Content

Goal: Students will compose a message and provide ideas and information appropriate to its topic, audience, setting, and purpose.

Objectives: Students will:

- (1A) Identify the components of effective oral communication of an idea with an argument or thesis supported by evidence.
- (1B) Demonstrate the knowledge of how to select appropriate material that will be understood by the audience.
- (1C) Apply organizational and explanatory strategies suitable to the topic, audience, setting and purpose of the message that is being delivered.

Skills

Goal: Students will demonstrate the ability to deliver effective oral presentations.

Objectives: Students will:

- (2A) Speak clearly and employ a rich and imaginative vocabulary with diction and pronunciation appropriate to the context.
- (2B) Present fluently, maintain eye contact with the audience, and use gestures appropriate to the context.
- (2C) Define the thesis and/or purpose of the message, use smooth transitions from one section to the next, and end with a clear and direct conclusion.

- (2D) Demonstrate the effective and judicious use of detail and evidence in substantiating and/or illuminating the presentation's central thesis.

Global Awareness

Content

Goal: Students will demonstrate knowledge of the history, culture, and/or political systems of societies, states, and peoples other than the United States.

Objectives: Students will:

- (1A) Identify and describe the history, social structures, political institutions, and/or patterns of cultural expression that characterize specific societies, states, and peoples outside the United States.
- (1B) Identify the various factors that have contributed to the history and development of social structures, political institutions, and patterns of cultural expression that characterize specific societies, states, peoples, and cultures outside the United States.

Skills

Goal: Students will demonstrate how their knowledge of geographical regions other than the United States fosters greater awareness of the world in which the students live.

Objectives: Students will:

- (2A) Critically analyze how the history, culture, and/or political systems of geographical regions other than the United States inform the way people outside the United States view themselves.
- (2B) Critically analyze and reflect on how their knowledge of the history, culture, and/or political systems of geographical regions other than the United States inform the way in which the students understand their relationship to the world.

Justice

Content

Goal: Students will demonstrate an understanding of justice, its relationship to power, and the ways in which causes of injustice may be mitigated and justice promoted.

Objectives: Students will:

- (1A) Compare and contrast differing theories of justice, including the ways in which justice has been defined and conceived.
- (1B) Describe the factors that are responsible for injustice with particular emphasis upon the relationship of injustice to inequities in the distribution of power.
- (1C) Describe the ways in which the factors responsible for injustice might be mitigated in the cause of justice.

Skills

Goal: Students will think critically about the factors that create, permit, and/or mitigate the conditions of justice or injustice.

Objectives: Students will:

- (2A) Identify how the distribution of power is embedded in institutions, social structures, and/or codes of conduct.
- (2B) Critically analyze theories, policies, and practices in so far as they promote either justice or injustice.
- (2C) Demonstrate how the conditions of injustice might be mitigated by specific forms of action.

Ethics

Content

Goal: Students will demonstrate an understanding of ethical criteria and principles necessary for moral evaluation and their practical application.

Objectives: Students will:

- (1A) Identify and articulate the fundamental elements of at least two major ethical theories.
- (1B) Recognize the connection between ethical theory and behavior.
- (1C) Identify and understand the core assumptions that lie at the heart of ethical behavior.

Skills

Goal: Students will demonstrate the ability to employ ethical reasoning in matters of human concern.

Objectives: Students will:

- (2A) Critically evaluate how conceptions of moral obligation contribute to living a worthwhile life.
- (2B) Apply ethical theories in analyzing ethical dilemmas and questions.
- (2C) Defend an ethical position while displaying an awareness of opposing ethical arguments.

Diversity

Goal: Student will demonstrate an understanding of the diverse and multicultural character of the United States, including variables such as social class, race, gender, ethnicity, religion, or sexuality.

Objectives: Students will:

- (1A) Identify the impact of multiple variables on the American experience.
- (1B) Articulate the interplay of at least two of these variables on the American experience.
- (1C) Distinguish how the power structure in America affects diverse groups. (2C) Compare and contrast the varied experiences of individuals within American society.

All-College Honors Program

Director: Bruce J. Dierenfield, PhD

INTRODUCTION

The All-College Honors Program is a learning community of excellent and motivated students who take interdisciplinary courses and enjoy abundant opportunities for social interaction and cultural enrichment. Because the Honors Program replaces the entire core curriculum, Honors students need not take any regular core courses or fulfill any core requirements. All majors can complete Honors, and even triple majors have done so. Please see the Honors website for a more detailed description of the Honors Program and its faculty, facilities, and academic, co-curricular, and cultural opportunities at the All-College Honors' website (<https://www.canisius.edu/academics/office-academic-affairs/all-college-honors-program>).

QUALIFICATIONS

Admission to the All-College Honors Program is open to entering freshmen with strong academic records and to well-qualified transfer students who seek permission from the Honors director.

ADVISEMENT

All-College Honors students should see the Honors director regarding advisement questions.

PROGRAM COURSES

Curriculum (12 Honors courses, all of which count for 3 credits; there are no prerequisites).

HON 101	Honors English	3
HON 110	Western Tradition I	3
HON 111	Western Tradition II	3
Fine Arts Honors Course		3
History Honors Course		3
Literature Honors Course		3
Philosophy Honors Course		3
2 Religious Studies Honors Courses		6
Science/Math/Technology Honors Course		3
Social Science Honors Course		3
HON 451	Thesis	3

One of these Honors courses must focus on the American experience, and another must address diversity or global understanding.

Typically, Honors freshmen complete Honors English (HON 101) and Western Tradition (HON 110 and HON 111) in their first year. First-year Biology majors have room for only one of these courses in their first semester (usually HON 101) and another of them in the second semester (usually HON 111). If their schedule permits, Honors students may take additional Honors coursework, though only juniors and seniors may take Honors thesis (HON 451). Except for Honors thesis, the course number does not indicate the level of difficulty.

Most Honors students must also complete two non-Honors courses in another language (ancient, modern, or sign), unless they receive AP credit or have satisfactorily completed college-level foreign language coursework. International students whose native language is not English are exempt from this requirement.

PROGRAM EXPERIENCES

Honors courses are supported with a variety of co-curricular activities. Examples include visiting museums, art galleries, and houses of worship; attending cultural performances; sight-seeing places of historic significance; and dining at faculty homes or area coffeehouses.

The Honors Program and the Honors Student Association (separately) sponsor many different events, including a freshman orientation book discussion and cookout, an off-campus retreat, a luncheon series with community leaders, a book club, a film series, snow tubing and skating, lectures by nationally-known professors, jazz and orchestral concerts, visits to museums and sports arenas, ice cream socials, a 60-second talks program, a Thanksgiving dinner, a Christmas party, an Easter egg hunt, an annual banquet, and trips to major cities. The Honors Post-Journal publicizes and promotes these events.

In addition, many Honors students participate in community service projects, including a soup kitchen and an after-school program to feed and tutor disadvantaged children.

ADDITIONAL COURSE CONSIDERATIONS

Honors students may receive Honors credit for some qualifying Advanced Placement or International Baccalaureate scores, though there are no exemptions for Honors English or Western Tradition. Honors students are encouraged to study abroad and receive up to six hours of Honors credit for doing so.

Note: To graduate with All-College Honors distinction, students must receive credit for all twelve Honors courses taken and two courses in the same foreign language, and have an overall GPA of 3.25 in all Canisius courses.

RECOMMENDED SEMESTER SCHEDULE FOR HONORS PROGRAM COURSE REQUIREMENTS

Freshman

Fall	Spring
HON 101	HON 111

HON 110¹

Sophomore

Fall	Spring
1-2 Honors courses ²	1-2 Honors courses

Junior

Fall	Spring
1-2 Honors courses	1-2 Honors courses

Senior

Fall	Spring
HON 451	1-2 Honors courses

¹ Biology majors take this class in the fall of the sophomore year

² Biology majors generally take 2 courses in the fall of the sophomore year, including HON 110

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Honors students will demonstrate academic maturity.

Students will:

- Objective A: Take the lead in researching and writing the thesis;
- Objective B: Incorporate suggestions made by the thesis adviser;
- Objective C: Meet thesis deadlines.

Student Learning Goal 2

Honors students will exhibit strong critical thinking skills.

Students will:

- Objective A: Identify salient arguments in the literature;
- Objective B: Gather, select, and organize credible evidence in crafting the thesis;
- Objective C: Draw warranted conclusions from the evidence presented;
- Objective D: Generate new ideas based on their research.

Student Learning Goal 3

Honors students will follow appropriate writing conventions.

Students will:

- Objective A: Write the thesis in a clear and concise style;
- Objective B: Avoid most mechanical mistakes in writing the thesis;
- Objective C: Use an appropriate form of documentation in presenting the thesis.

Student Learning Goal 4

Honors students will operate in an intellectually honest fashion.

Students will:

Objective A: Formally acknowledge all borrowed information and ideas in the thesis.

HON 101 Honors English

3 Credits

Various literary genres. Works by writers representing a wide variety of places, times, nationalities, and philosophies. Student's writing refined through these readings and composition assignments.

Restriction: restricted to honors students or by permission of the honors director.

Offered: fall.

HON 105 Disease, Health, and Medicine in America

3 Credits

This interdisciplinary course traces the history of disease, health, and medicine from Columbus' deadly times to the current threats of a Zika epidemic, lead poisoning from contaminated water, and Buffalo's heroin crisis. Students will learn about modern medical miracles and horrifying medical experiments, visit the Museum of disABILITY History, conduct research on an area of personal interest, and hear from an addiction expert. The theory behind this course is the way that we define and treat disease reflects contemporary historical events and our social and cultural values, as well as existing science, education, economics, and technology. Fulfills either the History, Science/Math/Tech, or Social Science requirement in Honors. It also fulfills the American Experience requirement.

Restriction: restricted to honors students or by permission of the honors director.

Offered: summer.

HON 108 The Rise, Fall, & Rebirth of Buffalo

3 Credits

This interdisciplinary course focuses on the rich history, architecture, and culture of Buffalo, New York, known as the Queen City of the Lakes and the City of No Illusions. Through a Place as Text approach, we will visit architectural gems by Sullivan, Richardson, Wright, and Green; Millionaires' Row on Delaware Ave.; organized crime sites; the Colored Musicians' Club; and Buffalo's revived waterfront. Fulfills either the History or Social Science requirement in Honors, as well as the American Experience requirement.

Restriction: restricted to honors students or by permission of the honors director.

Offered: summer.

HON 110 Western Tradition I

3 Credits

Introduces students to significant intellectual and material elements of Western Civilization from the Ancient World through the Middle Ages. Through an interdisciplinary approach, this course investigates the presumptions, motivations, and expectations of westerners in order to ascertain what is peculiarly 'western' about the world in which we live and think.

Restriction: restricted to honors students or by permission of the honors director.

Offered: fall.

- HON 111 Western Tradition II** 3 Credits
Introduces students to significant intellectual and material elements of Western Civilization since the Renaissance. Through an interdisciplinary approach, this course investigates the presumptions, motivations, and expectations of westerners in order to ascertain what is peculiarly 'western' about the world in which we live and think. HON 110 is not a prerequisite.
Restriction: restricted to honors students or by permission of the honors director.
Offered: spring only.
- HON 211 Masters of the Modern Mind: Marx, Nietzsche, and Freud** 3 Credits
Careful study of major works by these seminal thinkers and an analysis of their influence on modern thought. Fulfills the Philosophy requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 212 Beauty Matters: Philosophical Considerations of Beauty from Ancient Times to the Present Day** 3 Credits
An examination of the nature and importance of beauty as an aesthetic principle and as a source of value for our lives. The course covers issues of beauty and the sublime in ancient and early modern times, but focuses on philosophical literature on beauty from the last few decades, often focusing on issues related to gender and race. Fulfills the Philosophy requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 214 Sights & Sounds: Philosophy, Music, Film** 3 Credits
An introduction to the philosophy of music and to the philosophy of film. Students need have no special knowledge of music or film, but should have an interest in listening to music and watching film. The first half of the course will explore philosophical readings that focus on different aesthetic characterizations of music and various debates that have followed philosophical theories in formalism and expression accounts. While the debates often originated in eras before the popular music of the 20th century, students are encouraged to apply these views to the wide range of their personal listening habits and to share them with the group. The second half will explore philosophical readings on film and delve into common debates in which philosophers have engaged regarding contemporary film, including questions about its nature, whether films have authors, how film engages our emotions, and what relationship film has to ethics, criticism, and knowledge. Fulfills either the Philosophy or Fine Arts requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 216 Honors Philosophy** 3 Credits
Selected topics in philosophical inquiry, such as rationalism, empiricism, epistemology or metaphysics. Fulfills the Philosophy requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 217 Cities, Suburbs, and Spaces** 3 Credits
This course examines the 'built' environment of human beings, such as parks, bedrooms, churches, sidewalks, streets, and transportation systems, in order to determine what kinds of cities, suburbs, and spaces can best contribute to human flourishing. Fulfills the Philosophy or Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 218 Intellectual History of the West** 3 Credits
This course takes a historical approach to introduce the main ideas of the principal philosophers and thinkers of Western civilization from the beginnings in ancient Greece to the 20th century. Fulfills either the History or Philosophy requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 219 Revolutions of the West** 3 Credits
This new interdisciplinary course treats the political philosophy and patterns of the four main revolutions in the West, namely, the French Revolution (1789-1799) and its legacy, the Mexican Revolution (1910-1920), the Russian Revolution (1917), and the Cuban Revolution (1953-1959). We will also examine the views of seminal thinkers whose writings inspired these revolutions, including John Locke, Jean Jacques Rousseau, Karl Marx, and Vladimir Lenin. The nature of revolutions and the profound social and cultural changes wrought by these pivotal upheavals will also be considered. Fulfills either the History, Philosophy, or Social Science requirement in Honors, as well as the Diversity/Global Awareness attribute. Offered: Occasional.
- HON 222 History & Literature of the American Civil War** 3 Credits
This course will study the various historical reasons for the Civil War, including the social, cultural, and political contexts of 19th-century America, and the literature it produced. We will compare celebrated works, such as Uncle Tom's Cabin, with lesser-known authors, and question if the 'real war' is indeed in these books. Fulfills either the History or Literature requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 223 Religion, Politics, & the Presidency** 3 Credits
This course will begin with the Puritan notion of American exceptionalism, and then turn to the religious thinking of the Founding Fathers who drafted the First Amendment. Among other topics, the course will look at several presidential elections, the adoption of religious mottos, the rise of conservative religious groups that promoted political action, and the debate over hot-button issues, such as immigration, school prayer, abortion, and same-sex marriage. Anticipated class activities include an election night party. Fulfills either the History, Religious Studies, or Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 224 Disease, Health, and Medicine in America** 3 Credits
Treats life and death issues--literally--from the deadly smallpox brought by Columbus to the bio-terrorism of today. The theory of this course is that the way Americans define and treat disease reflects contemporary historical events and our social and cultural values, as well as the existing science, education and technology. Fulfills either the History, Science/Math/Tech, or Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: once a year.

- HON 226 African-American Lives & Culture** 3 Credits
This interdisciplinary course will focus on the lives of representative African Americans; consider several aspects of African-American culture, including history, literature, religion and music; and provide co-curricular opportunities. The course will conclude with a consideration of the claim that America has become a post-racial society. Fulfills either the History, Religious Studies, or Social Science requirement in Honors, as well as the American Experience or Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 227 Vices and Addictions in American Society** 3 Credits
Explains and analyzes the impact of vices and addictions on American daily life and leisure, disease and treatment, the economy, government policies, and reform crusades. Some of the bad habits and addictions to be considered include tobacco, alcohol, marijuana and cocaine, prescribed drugs, coffee, chocolate, and sports betting. Fulfills either the History, Science/Math/Tech, or Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: once a year.
- HON 228 All-College Honors Program** 3 Credits
This course will begin with the 1948 United Nations declaration on genocide and, based on that document, will examine the many ways in which genocide was inflicted upon the indigenous peoples of the Americas, especially the Indians of North America. It will examine the nature and scope of the atrocities that were employed to carry out that genocide. It will also explore how race, religion, and sex contribute to genocide. Finally, it will examine the continuation of genocidal policies by the U.S. government and the long-lasting effects of those policies across generations to the present. Fulfills the History requirement in Honors, as well as the American Experience or Diversity/Global Awareness attribute.
Offered: Occasionally.
- HON 231 War & Peace since 9/11** 3 Credits
In exploring the nature of world politics and American foreign policy since 9/11, this course focuses on what the United States must do to maintain its traditional reserves of 'hard' and 'soft' power in an age of globalization and terrorism. Fulfills the Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 232 American Government: The User Guide** 3 Credits
Politics matters. It will significantly impact everyone, regardless of career path. This course will provide the basic tools that students will need to comprehend and effectively participate in American government. Topics will include the three branches of government, American federalism, elections, civil rights, civil liberties, taxes, and budgets. Fulfills the Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 238 The American Presidency** 3 Credits
Fulfills the Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 241 History of Judaism** 3 Credits
An introduction to the history, religion, and literature of Judaism from the ancient world to the present. Fulfills either the Religious Studies or History requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 242 Cultural Constructions of Jesus** 3 Credits
We will examine the various presentations of Jesus that have occurred in different historical and cultural contexts, beginning with the canonical Gospels. The course concludes with a survey of modern interpretations of Jesus: the American Jesus; the Jesus of Latin America, Asia, and Africa; and Jesus in modern literature and film. Fulfills the Religious Studies requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 245 Homeric Epic** 3 Credits
This course seeks to examine a series of questions prompted by Homer's Iliad and Odyssey and look at the broader consequences of those responses from antiquity to the present. It will also introduce the history and language of ancient Greece. No prior knowledge of Greek is required. Fulfills either the History or Literature requirement in Honors, as well as the Diversity/Global Awareness requirement. In addition, this course counts as one of the two required courses in foreign language.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 246 American Religions** 3 Credits
This course considers the history of American religions from pre-contact times to the present, It focuses on the evolution of religious faiths and religious ideologies as varying groups came into contact with one another, splintered off into new faith communities, and founded completely original systems of religious belief. Fulfills either the History or Religious Studies requirement in Honors, as well as the American Experience or Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 247 Islam: Religion, History, and Culture** 3 Credits
A study of Islamic scriptures, Muslim cultures, social institutions, religious practices, and Muslim and Western writings to better understand Islam and Muslims in the U.S. and throughout the world. Fulfills either the Religious Studies, History, or Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 248 Religions of the East** 3 Credits
In this class, we will survey some of the major religious traditions of East and South Asia, including Hinduism, Buddhism, Confucianism, and Daoism. Particular attention is placed on historical and contemporary beliefs, practices, texts, and cultures, as well as their changes over time. Fulfills either the Religious Studies or Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 249 Magic, Science, and Religion 3 Credits

This course will consider diverse ways in which world cultures conceive, make use of, and tap into the realms of the extra-human. We will focus not only on 'exotic' societies and peoples, but also explore the meanings of magic, science and religion in more familiar contemporary North America. Fulfills either the Religious Studies or Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.

Restriction: restricted to honors students or by permission of the honors director.

Offered: occasionally.

HON 250 Caesar & Christ 3 Credits

This course studies the early days of biography as a genre of Greek & Latin literature and its association with imperial and religious power. The course seeks to examine the characteristics of classical lives and Christian hagiography and to consider their influence on modern biography. Since biography generally places the character sketch within a chronological narrative, the course will examine the history of the Roman Empire, early Christendom, and the earliest days of the Holy Roman Empire, with particular focus on the developing struggle between secular and religious authority. The course will also introduce students to the Latin language. Fulfills either the History or Literature requirement in Honors, as well as the Diversity/Global Awareness requirement. In addition, this course counts as one of the two required courses in a foreign language.

Restriction: restricted to honors students or by permission of the honors director.

Offered: occasionally.

HON 255 The Buffalo Experience 3 Credits

This interdisciplinary course will focus on the history, architecture, and culture of Buffalo, New York, known variously as the 'Queen City of the Lakes' and the 'City of No Illusions.' There will be walking tours and cultural experiences to supplement classwork. Fulfills either the History or Social Science requirement in Honors, as well as the American Experience requirement.

Restriction: restricted to honors students or by permission of the honors director.

Offered: occasionally.

HON 270 Psychobiography 3 Credits

This course will provide a forum to understand the life of an individual, a literary figure, or a historical period through the use of psychological science. At the same time, it facilitates the critical evaluation of psychological theory by examining where theory and research work in real-world contexts. Fulfills Social Science or Science/Math/Tech requirement in Honors.

Restriction: restricted to honors students or by permission of the honors director.

Offered: occasionally.

HON 316 Famous Jesuits 3 Credits

Students will study the lives and works of famous Jesuits, starting with Ignatius Loyola, who founded the religious order that bears his name (Society of Jesus). The course will also look at Matteo Ricci's efforts to adapt Christianity to Chinese culture and several contemporary Jesuits, including Francis I, the first Jesuit pope. Fulfills the Religious Studies requirement in Honors, as well as the American Experience or Diversity/Global Awareness requirement.

Restriction: restricted to honors students or by permission of the honors director.

Offered: occasionally.

HON 321 Critical Issues in the History of Photography 3 Credits

This seminar proposes to examine the long-standing critical issues surrounding the many discursive spaces (e.g., the museum, family scrapbook, illustrated press, and court of law) that photography occupies in our common (that is, shared) culture. Fulfills the Fine Arts requirement in Honors.

Restriction: restricted to honors students or by permission of the honors director.

Offered: occasionally.

HON 323 Opera 3 Credits

Introduces students to opera. Students will develop an understanding of the aesthetics of opera by studying its elements, aspects of the operatic voice, the genre's history and examples of the art form in live and recorded performance. No previous musical knowledge or experience is required. Fulfills the Fine Arts requirement in Honors, as well as the Diversity/Global Awareness requirement.

Restriction: restricted to honors students or by permission of the honors director.

Offered: spring.

HON 324 The Symphony 3 Credits

Introduces students to the symphony. Students will develop an understanding of the symphonic form from the classical period to the present through a study of major composers and their works. No previous musical knowledge or experience is required. Fulfills the Fine Arts requirement in Honors, as well as the Diversity/Global Awareness requirement.

Restriction: restricted to honors students or by permission of the honors director.

Offered: fall.

HON 325 Art, Advertising, & Activism 3 Credits

This interdisciplinary seminar explores the social function of art. It emphasizes contemporary art practices, the effect of technology on art, and first-hand art 'experiences' by visiting artist studios and galleries. Using art as a vehicle for social change, students will develop aesthetic critiques pertinent to this age of images. Fulfills either the Fine Arts or Social Science requirement in Honors, as well as the American Experience requirement.

Restriction: restricted to honors students or by permission of the honors director.

Offered: occasionally.

HON 345 Explorations in the Development of Mathematics 3 Credits

Explores famous problems in mathematics to consider the role of culture in changing motivation, concept, and technique of influential mathematicians. Fulfills the Science/Math/Tech requirement in Honors.

Restriction: restricted to honors students or by permission of the honors director.

Offered: occasionally.

HON 347 Mathematics: Patterns, Problems, & Puzzles 3 Credits

Mathematical problems and puzzles can often be solved by investigating underlying patterns. This course analyzes such patterns in the mathematical fields of number theory, geometry (2D & 3D), and logic. The history of the mathematics (and the mathematicians) involved with these patterns, problems and puzzles will also be explored. Fulfills the Science/Math/Tech requirement in Honors.

Restriction: restricted to honors students or by permission of the honors director.

Offered: occasionally.

- HON 350 The Theory of Almost Everything** 3 Credits
 Will develop an understanding of the state of modern, fundamental physics so that students gain a conceptual idea about the unification of all physical laws, including gravity, electromagnetism, and nuclear forces. The course is set at a level of the general public, with the bulk of the readings being science popularization. Fulfills the Science/Math/Tech requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 351 Biotechnology and Society** 3 Credits
 An examination of recent developments in biotechnology and how they have shaped contemporary society. Fulfills the Science/Math/Tech requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 352 Water and Society** 3 Credits
 From the ongoing drought in California to the toxic algae blooms in Lake Erie, the importance of clean freshwater is gripping the headlines. In this class, we will explore the science, history, and politics of water resources in the U.S. We will also explore the science behind the hydrology and environmental quality of freshwater systems, delve into the history and politics of Western water law, understand how past water distributions have complicated efforts to deal with the current drought, look at ongoing controversies involving water use in the Great Lakes, and explore how changes in technology and society may lead to the sustainable use of this most limiting resource. Fulfills either the Science/Math/Tech or Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 354 Science in the 21st Century** 3 Credits
 Topics include the technology gap, global warming, genetically modified foods, alternative fuels, global food security and environmental stewardship. The seminar will explore the scientific underpinnings of the scientific discussions of our time, focusing on science fact, societal needs (nutrition), environmental concerns, population density, and global moral responsibility. Students will read primary literature, watch media reports, and debate scientific topics. Fulfills either the Science/Math/Tech or Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 356 Pope Francis: 21st-Century Thinker** 3 Credits
 Pope Francis' recent visit to the U.S. revealed that he speaks to our times, as well as pointing us to the future. He embodies a new kind of religious life that is not locked into 20th-century Catholic issues like pre- and post-Vatican II. Likewise, he calls all people beyond the tired polarities of left vs. right wing, Western vs. non-Western, religious vs. spiritual, and so forth. To understand his theology and philosophy more deeply, we will consider Francis' two formal documents as pope, i.e., his 2013 apostolic letter *Evangelii Gaudium* and his 2015 encyclical *Laudato Si*. We will also read his writings on spirituality and his fresh insights into the Ignatian way of life. Furthermore, we will see how his life story has shaped his message, via Austen Ivereigh's detailed and highly regarded biography. Finally, we will appreciate how the world of art and popular culture have responded to this compelling and inspiring leader. Fulfills either the Religious Studies or Philosophy requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 357 Global Pentecostalism** 3 Credits
 Through the interdisciplinary lenses of history, theology, anthropology and sociology, this course examines the nature, history, and global manifestations of Pentecostalism--'The Third Force in Christianity.' Fulfills the Religious Studies or Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 358 Women and Religion** 3 Credits
 This course will analyze religion as it has affected the roles and status of women. We will examine four major religious traditions--Judaism, Christianity, Islam, and Hinduism--as well as the modern Goddess movement. Each unit will consider gender within the historical development of the religion, as well as its effect on modern practices. Fulfills either the Religious Studies or Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 359 Spiritual Autobiography** 3 Credits
 Considers the characteristics and patterns of spiritual autobiographies, analyzes these texts within the historical, cultural and religious developments of each author's time period, and evaluates modern spiritual autobiographies for their connections to the students' own experiences. Sample autobiographies include those of Augustine of Hippo, Vera Brittain, John Bunyan, Edward Gosse, and Ignatius of Loyola. Fulfills either the Religious Studies or Literature requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

- HON 360 Topics in Modern Christianity** 3 Credits
After a brief historical survey of the Christian tradition, we will explore issues in modern Catholicism. These include Vatican II, Liberation Theology, the priest sex scandal, the decline in Catholic allegiance in Latin America, the Charismatic movement, and the Francis Effect. Fulfills either the Religious Studies or Social Science requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 363 The Bible & Popular Culture** 3 Credits
This class will examine pop culture references to the Bible, including those found in art, music, literature, television, film, and social media. We will critique these uses of the Bible and attempt to sort out their implications. Fulfills either the Religious Studies or Social Science requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 370 Life-Writing: The Art of Biography** 3 Credits
This course will introduce students to classics in the genre of biography from the ancient world to the present, and explore the fundamental theoretical issues underlying the writing and reading of lives. Students will write both as critics and as biography. Fulfills the Literature requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 373 Living Writers** 3 Credits
An examination of contemporary literature written by published authors who will visit our class. We will pay special attention to how assigned books reflect and respond to particular contemporary realities, such as the trauma of war, cultural upheaval, spiritual crisis, racial tension, and the challenge of achieving intimacy in a technological world. Fulfills the Literature requirement in Honors.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 374 A Novel Nation: American Literature & Philosophy in the 19th Century** 3 Credits
This team-taught course will explore major 19th-century American literary and philosophical movements, including romanticism, transcendentalism, sentimentalism, pragmatism, and realism. We will read a range of different genres, from essays, poems, novels, short stories, slave narratives, and memoirs, and see how literature and philosophy complement each other as disciplines and how they differ. Fulfills either the Literature or Philosophy requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 379 Remodeling Old Texts** 3 Credits
This course will explore the phenomenon of adapting classic literary narratives to modern sensibilities in order to consider contemporary issues. More than simply 'updating' classic texts, these remodelings of texts attempt to elicit deeper understandings to give voice to marginalized characters, or to highlight truths embedded within the texts. Fulfills the Literature requirement in Honors, as well as the Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 380 Modern American Novel** 3 Credits
A general introduction to major American writers from 1920 to the present. Unlike traditional survey courses, this course will not be structured chronologically. Rather, we will explore authors in tandem, examining how different generations, genders, and ethnicities approach a similar topic. We will, of course, deal with the historical, chronological inheritances inherent in the texts, but they will not be read in order. Fulfills the Literature requirement in Honors, as well as the American Experience requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 381 Contemporary Literary Movements** 3 Credits
We will examine four major literary movements of the last half of the 20th century, i.e., the Beat Generation, the Latin American Boom, Ethnic Minority literature, and Gay & Lesbian writing, focusing on two major writers from each movement. Fulfills the Literature requirement in Honors, as well as the American Experience or Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.
- HON 382 Detective Fiction** 3 Credits
Explores how detective fiction has evolved in various social, political, cultural, historical, and linguistic contexts from its American and British origins to a more global context. The course examines how the genre functions as social commentary in these contexts. Students will address various topics, especially the relationship that different cultures, societies, ethnicities, and other groups have toward the law and justice, which is distinctly different from Anglo-American jurisprudence. They will also explore how the social, cultural, and political realities of the American South and Southwest, Italy, Spain, the Caribbean, and Latin America, and their often repressive and violent histories, make detective fiction in these locales somewhat different than that experienced in mainstream markets in the U.S. and the UK. By studying theoretical perspectives, students will enhance their skills in literary analysis. Fulfills the Literature requirement in Honors, as well as the American Experience or Diversity/Global Awareness requirement.
Restriction: restricted to honors students or by permission of the honors director.
Offered: occasionally.

HON 383 Rock & Roll and Literature 3 Credits

In this seminar, we will look at the literature of Rock & roll--fiction, poetry, memoir, and journalism--that addresses one of America's most loved musical forms. While our study will not be limited to American writing, we will explore the ways that Rock & Roll is particularly American. What exactly does Rock & roll bring to the listener, and is that more than just music? We will consider the ways in which Rock & roll acts as a destructive and redemptive force, and the ways it interacts with gender and cultural identity. We will look at the "revolutionary spirit of rock and roll," as Patti Smith called it, and how it has been both a catalyst of change and a sign of it. We will be listening, too. Each work will have a soundtrack, so we will read the books in the context of their songs. As for writing assignments, students will produce analytical essays and other styles of writing about music. Fulfills the Literature requirement in Honors, as well as the American Experience attribute.

Offered: Occasional.

HON 384 American Immigrant Voices 3 Credits

In this literature course, we will explore contemporary American immigrant voices in fiction and poetry. We will look to answer several questions: What are the themes and preoccupations of contemporary American literature by and about immigrants? What similarities and differences might we see in the stories from writers who come from different countries? How is literature written by immigrants in America changing? What role do immigrant voices play in American literature as a whole? Selections from Junot Diaz, Chimamanda Ngozi Adichie, NoViolet Bulawayo, and Cohn Toibin. Fulfills the Literature requirement in Honors, as well as the American Experience or Diversity/Global Awareness requirement.

Restriction: restricted to honors students or by permission of the honors director.

Offered: occasionally.

HON 385 Modern Myths and Fairy Tales 3 Credits

Students will explore the continuing influence of fairy tales and Greek and Roman myths on contemporary literature. In addition, we will consider the cultural contexts of the initial versions of the stories and their more recent retellings, and we will analyze the works from several critical standpoints, including historical and feminist. Fulfills the Literature requirement in Honors, as well as the Diversity/Global Awareness requirement.

Restriction: restricted to honors students or by permission of the honors director.

Offered: occasionally.

HON 388 Major American Writers 3 Credits

This new course will serve as a general introduction to major American writers from colonial times to the present. As such, this course will be loosely organized around the theme of freedom, the quintessential myth of American identity. We will explore creative responses to the personal experience of oppression and resistance, particularly in relation to inequalities experienced because of race and gender. We will also examine the American experience in terms of religious and sexual freedom. The course will be particularly focused on what authors have to say about the nature of freedom, or its absence, and how to achieve it on an individual level. Fulfills the Literature requirement in Honors, as well as the American Experience attribute.

Offered: Occasional.

HON 430 Tutorial 3 Credits

This course will be conducted as a tutorial in the Oxbridge (Oxford & Cambridge Universities) style, i.e., one or two students will meet with the instructor once weekly to discuss readings and write & revise papers. Interested students should contact the instructor for mutually agreeable topics.

Restriction: restricted to honors students or by permission of the honors director.

Offered: occasionally.

HON 451 Thesis 3 Credits

Independent research on topic selected by student, culminating in a research paper or creative writing project. Students work closely with their faculty advisers.

Restriction: junior or senior standing in the honors program.

Offered: fall & spring.

HON 499 Independent Study 3 Credits

Study and work with a faculty supervisor. Project to be determined by faculty agreement. Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

Service Learning

FORMING WOMEN AND MEN FOR OTHERS THROUGH ACADEMIC COURSES

Service-Learning (SL) is the incorporation of community service within academic courses, together with structured reflection upon that experience and its connection to the course. The service becomes "a text" within the course. It is called service-learning when it is required within a course. SL is experiential education. It can also contain immersion experiences and researching community needs.

As an educational method, service-learning provides students with fertile ground on which to test theories acquired in the classroom and put them into practice in the community.

Research has indicated that students involved in service-learning courses agree that their service experience helped them better understand the course, and has benefited them personally. Service-Learning is also "values education." The development and formation of values arise out of a social consciousness of the situation of "the other", especially the other who is deprived in some way. Service-Learning attempts to make students more aware of social injustices, causes them to consider serious civic engagement in society and introduces them to the challenges and possibilities of systemic change. The integration of service-learning into an undergraduate or graduate course has five key components:

1. Service activities are required. The number of service hours can vary, but the suggested norm over a semester is 15-20.
2. Clear connections exist between service activities and the academic course.
3. Service activities benefit the people receiving the service, the students, the service partner and the university in a significant way.
4. Students engage in a carefully articulated reflection process around the service, the connection to the course and the way in which the experience has affected them.

- Assessment of the outcomes of the service experience is done through evaluations by the service agency, the student and the professor.

For more information, go to the Center for Service-Learning website (<https://www.canisius.edu/academics/office-academic-affairs/center-service-learning>).

study abroad

Students who study abroad say that it is a life-changing experience. Whether you spend a semester, a summer, or a year abroad, living and learning in another country will open the doors to unique personal and professional experiences as well as improve foreign language skills. Some programs enable students to work as volunteers or interns during their stays and combine language and culture courses with their academic work. The Office of Study Abroad and International Partnerships is continually improving and increasing the options made available to Canisius students interested in expanding their horizons. Canisius offers study abroad programs in the following locations:

- Antwerp, Belgium – University of Antwerp
- Barcelona, Spain-IQS Universidad Ramón Llull
- Berlin, Germany – Berlin School of Economics and Law
- Dortmund, Germany – Technical University of Dortmund
- Eichstaett, Germany – Catholic University of Eichstaett
- Florence, Italy – Lorenzo de' Medici University
- Galway, Ireland – National University of Ireland at Galway
- Glasgow, Scotland – University of Glasgow¹
- Lille, France – The Catholic University of Lille-IESEG School of Management
- Lima, Peru – Universidad del Pacifico
- London, England – London Metropolitan University
- Madrid, Spain – Pontifical University Comillas
- Oviedo, Spain – University of Oviedo
- Paris, France – IESEG School of Management
- Porto Alegre, Brazil – Federal University Rio Grande do Sul
- Queensland, Australia – University of the Sunshine Coast
- Rio de Janeiro, Brazil – Pontifical Catholic University of Rio de Janeiro
- Rome, Italy – Lorenzo de' Medici University
- San Salvador, El Salvador – Casa de la Solidaridad, University of Central America
- Seoul, Korea – Sogang University
- Strasbourg, France – University of Strasbourg, School of Management (one-year dual degree program available)
- Tokyo, Japan – Sophia University

¹ Open only to students in the All-College Honors Program.

Students interested in study abroad should begin planning early in their college experience so that preliminary coursework and language study can be completed in advance. Students should confer with the Study Abroad office and with their academic advisor to discuss the options.

English as Second Language

Program Director: Barbara J. Porter, PhD

This program will not be available after spring 2017.

INTRODUCTION

The English as a Second Language (ESL) Program at Canisius is a part-time program intended to assist all international students with the improvement of their English language skills. Our ESL Program is not an intensive language program, but a special academic support program designed to assist both exchange students visiting for a study abroad experience and international students seeking a degree.

All international students, including both exchange students and degree seeking students, must have their language skills evaluated. Students are initially screened based on application materials including scores on TOEFL or IELTS as well as transcripts indicating coursework in English at other institutions. Those students whose test scores and other documentation suggest language competency at approximately a high intermediate level will be waived from testing. Students without TOEFL, IELTS and other internationally recognized documentation will be asked to complete a comprehensive language assessment test given during International Student Orientation. Students with limited documentation and low TOEFL or IELTS scores will also be tested. This allows us to identify the best course work for each student's needs. Students who demonstrate advanced proficiency in English on the placement test will place out of ESL courses.

Courses are offered in all four language areas including reading, writing, speaking and listening. The purpose of these courses is to assist students with the development of the language skills they will need in both academic and social settings. Classes are small and provide not only language instruction but social support. Some students are still developing basic English language skills and take introductory ESL courses exclusively in the first semester. On some occasions, usually in the first semester, students with less than ideal language competencies can take as many as 12 credits of ESL in preparation for more demanding and challenging content courses. Most students find it an advantage to combine a number of ESL courses with carefully selected content courses as they adjust to the demands of student in another language. In all instances, matriculating students can use ESL courses to fulfill free elective credit requirements. Some ESL courses fulfill core curriculum requirements. Exchange students who need ESL courses will use those courses for transfer back to their home institution.

For more information on the program and resources for English language learners please go to the ESL program webpage (<https://www.canisius.edu/academics/programs/english-second-language>).

ADVISEMENT

International exchange students are advised by the appropriate Associate Dean or an advisor designated by the Associate Dean. International students seeking a degree should have an advisor in their major and should contact the department directly to have an advisor assigned if they do not already have one. All majors should work closely with their advisor(s) in their major(s) in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1: Reading

Students in the ESL program will critically read and analyze college level texts.

Students will:

- **Objective A:** Pre-read and scan academic materials to develop a sense of a text's scope and emerging meaning;

- **Objective B:** Determine the author's purpose, intended audience, tone and the text's general context;
- **Objective C:** Recognize and understand a work's thesis or theme and the methods of organization used to support the thesis or develop the theme;
- **Objective D:** Summarize, paraphrase, synthesize ideas from what they have read;
- **Objective E:** Evaluate the evidence presented and state an opinion about what they have read.

Student Learning Goal 2: Writing

Students in the ESL program will demonstrate basic competence in managing the writing process and producing effective written products including college essays and similar types of academic writing.

Students will:

- **Objective A:** Demonstrate effective word choice, vocabulary, idioms, grammar and sentence structure allowing accurate communication of meaning in written work;
- **Objective B:** Brainstorm, draft, and outline ideas for essays and other forms of academic writing;
- **Objective C:** Develop a thesis and supporting topics and organize evidence using basic rhetorical patterns;
- **Objective D:** Revise the organization of written work to increase unity, coherence and emphasis;
- **Objective E:** Integrate material from outside sources logically and gracefully with their own writing;
- **Objective F:** Cite sources according to conventional documentation style, and maintain academic integrity in their work.

Student Learning Goal 3: Speaking

Students in the ESL program will develop effective speaking skills such that they can be understood by classmates, faculty, staff, and others for academic and social purposes including conversations, classroom discussions and oral presentations

Students will:

- **Objective A:** Converse with general clarity using pronunciation/stress/intonation patterns which allow for overall intelligibility;
- **Objective B:** Demonstrate effective word choice, vocabulary, idioms, grammar and sentence structure allowing accurate communication of meaning in written work;
- **Objective C:** Articulate in conversation and oral presentations clearly organized ideas and supporting evidence in a vocabulary appropriate to the target audience;
- **Objective D:** Recognize their own verbal mistakes and correct them;
- **Objective E:** Give a standard oral presentation which informs and/or persuades the audience;
- **Objective F:** Integrate material from outside sources logically and gracefully into an oral presentation;
- **Objective G:** Cite sources according to conventional documentation style, and maintain academic integrity in their work.

Learning Goal 4: Listening

Students in the ESL program will be able to listen to and understand the main ideas and significant relevant details in various listening contexts.

Students will:

- **Objective A:** Understand and discuss ideas delivered in academic lectures and social conversations;
- **Objective B:** Develop and ask questions appropriate to a given listening context;
- **Objective C:** Understand and respond appropriately to the speech of multiple speakers;
- **Objective D:** Paraphrase the ideas of classroom lessons and turn them into coherent and well developed notes;
- **Objective E:** Understand and discuss ideas delivered through various media.

ESL 111 The Craft of Writing I

3 Credits

Beginning level. Focus on mastering the writing process. Review of the basics of sentence and paragraph structure. Focus on organizing and developing short essays (1-2 pages) using key rhetorical patterns. Participation in writing workshops. Emphasis on appropriate use of vocabulary, idioms, grammar and sentence structure.

Offered: generally fall & spring.

ESL 112 The Craft of Writing II

3 Credits

Intermediate level. Focus on mastering the writing process. Review of the basics of sentence and paragraph structure. Focus on organizing and developing short essays (2-4 pages) using key rhetorical patterns. Practice with writing research based essays. Participation in writing workshops. Emphasis on appropriate use of vocabulary, idioms, grammar and sentence structure.

Offered: generally fall & spring.

ESL 114 The Art of Reading I

3 Credits

This course is intended to help students in all majors to improve their reading skill. Readings will be selected from various publications in areas which reflect the nature of academic and professional reading challenges including history, literature and art, social sciences and sciences, religion and philosophy.

Offered: fall.

ESL 115 The Art of Reading II

3 Credits

This course is intended to help students in all majors to improve their reading skill. Readings will be selected from various publications in areas which reflect the nature of academic and professional reading challenges including history, literature and art, social sciences and sciences, religion and philosophy. ESL 115 may be taken as a sequel to ESL 114.

Offered: spring.

ESL 116 The Art of Conversation I

3 Credits

Students will participate in exercises ranging from dialogues to brief presentations. Emphasis on accurate communication of meaning as well as practice listening for main ideas and supporting evidence. Practice in asking and answering questions, understanding and responding appropriately to conversations with a partner and with multiple speakers in small groups. Practice in effective note taking.

Offered: fall.

ESL 117 The Art of Conversation II 3 Credits

Students will participate in exercises ranging from dialogues to brief presentations. Emphasis on accurate communication of meaning as well as practice listening for main ideas and supporting evidence. Practice in asking and answering questions, understanding and responding appropriately to conversations with a partner and with multiple speakers in small groups. Practice in effective note taking. ESL117 may be taken as a sequel to ESL116.

Offered: spring.

ESL 118 The Art of Oral Presentations 3 Credits

Students in this course will learn to develop and give polished oral presentations. Practice with formal presentations including PowerPoint, visual aids and question and answer sessions. Emphasis on research based presentations.

Fulfills College Core: Oral Communication

Offered: fall & spring.

ESL 499 Independent Study 3 Credits

This course is intended for students with special instructional needs. Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

Pre-Professional Programs

In addition to undergraduate majors and minors, Canisius offers several pre-professional programs. Students still must complete a major, but these programs help prepare students to meet the admissions requirements for professional schools. Please note that often different professional schools have specific individual requirements and students are encouraged to work with the pre-professional advisor for the program to ensure that they are meeting the requirements for the schools to which they intend to apply. Detailed information about the program is available within its section of the catalog. Please note that there is a general page for Pre-Medical and Pre-Health Professions in addition to specific information on each specific program.

- Pre-Law (p. 53)
- Pre-Medical and Pre-Health Professions (p. 54)
 - Pre-Dental Medicine (p. 52)
 - Pre-Medicine (p. 55)
 - Pre-Optometry (p. 56)
 - Pre-Pharmacy (p. 57)
 - Pre-Veterinary Medicine (p. 58)

Pre-Dental Medicine

INTRODUCTION

Students interested in a career in Dental Medicine have the option of pursuing any major along with completing specific prerequisites. Students must gain a thorough understanding of the profession through a range of shadowing experiences, demonstrate a commitment to service, and earn a competitive score on the Dental Admission Test (DAT). Students should work with the Pre-Med Advisor beginning in the first college year to select appropriate coursework based on their schools of interest, and to plan for appropriate co-curricular experiences. In addition to the information in this section, please check the general information at the pre-medical and pre-health section of the catalog (p. 54).

JOINT AND EARLY ASSURANCE PROGRAMS

Canisius College maintains relationships with University at Buffalo School of Dental Medicine and LECOM School of Dental Medicine (Bradenton, FL) which allow highly qualified students to gain early acceptance into dental school. Students may be admitted into the program upon enrolling at Canisius as freshmen (3+4 program with University at Buffalo, 4+4 program with LECOM). Students may also apply to the University at Buffalo program (4+4) during their sophomore year or apply to the LECOM program during the freshman or sophomore year.

RECOMMENDED PRE-DENTAL COURSES

Academic admission requirements vary by dental school, but usually include the following courses:

English

One year of English composition:

FYS 101	Explorations of Academic Writing and Special Topics	3
ENG 101	Writing about Literature	3

Biology

At least one year of general biology with laboratory:

BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4

Chemistry

One year of general chemistry and one year of organic chemistry with laboratories:

CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4

Physics

One year of introductory physics with laboratory:

Select one of the following:

Option 1:		
PHY 201 & 201L	College Physics I and College Physics I Laboratory	
PHY 202 & 202L	College Physics II and College Physics II Laboratory	
Option 2:		
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	

PHY 224 & 224L General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory

ADDITIONAL PRE-DENTAL COURSES

Additional Pre-Dental courses may be needed depending on which schools students intend to apply to. Suggestions include:

Mathematics

Math requirements vary at the different dental schools. We recommend students take a minimum of either statistics (MAT 141 or PSY 201) or calculus (MAT 111). Chemistry majors must take MAT 141.

Behavioral/Social Science

One semester each of psychology (PSY 101 or PSY 102) and sociology (SOC 110). The behavioral science and humanities requirements vary at dental schools.

Biochemistry

Some dental schools require one semester of biochemistry. Students may take biochemistry in either the Biology Department (BIO 211-BIO 212 take both courses) or Chemistry Department (BCH 301-BCH 302 take one or both courses).

Additional Biology

Some dental schools have additional biology courses such as microbiology (BIO 307) or anatomy and physiology (BIO 114 and/or BIO 115) either required or recommended.

Pre-Law

The Frank G. Raichle Pre-Law Center

Pre-Law Committee: Robert Klump, Director, Department of Political Science; Peter J. Galie, Emeritus Professor/ Department of Political Science; Peggy Lillis Snajczuk, Esq. Pre-Law Advisory Council member; Julia Hilliker, Esq., Pre-Law Advisory Council member

The Frank G. Raichle Pre-Law Center assists students who wish to enter the legal profession by offering counseling and advisement regarding law schools and the Law School Admissions Test and by providing several partial pre-law scholarship awards to juniors and seniors. Internship and other opportunities are enhanced by the work of the college's Pre-Law Advisory Council

The Raichle Center also sponsors an annual lecture series on problems of law and American society. Raichle Lectures have included six justices of the U.S. Supreme Court.

Students interested in law are encouraged to contact a member of the pre-law committee at their earliest opportunity and are encouraged to join the pre-law fraternity, Phi Alpha Delta.

Pre-law students may wish to consider joining the college's Mock Trial team and enrolling by instructor's permission in the one credit Mock Trial course (LEG 101)

Students wishing to choose law as a career may major, as undergraduates, in any field or fields. They should bear in mind, however, that their aim must be the attainment of a broad liberal education. Specifically, they should attain considerable skill in language, knowledge of human institutions and values and an ability to reason critically. The committee therefore

recommends that students wishing to choose law as a career include in their undergraduate programs of study the following:

1. Courses which develop skills of accurate comprehension and precise expression in language.
2. Courses in which knowledge of human institutions can be attained, with special reference to American constitutional law and history.
3. Courses which develop abilities in logic and appreciation of ethical and political values.
4. Courses in introductory accounting and economics.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please visit the Pre-law webpage (<https://www.canisius.edu/academics/programs/pre-law>).

RECOMMENDED ELECTIVES

Accounting

ACC 201	Financial Accounting	3
ACC 202	Managerial Accounting	3

Classics

CLS 300	Roman Law and Society	3
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Criminal Justice

CRJ 449	Criminal Law	3
CRJ 450	Criminal Procedure	3

Economics

ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3

English

ENG 385	Persuasive Writing	3
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Philosophy

PHI 225	Logic (preparation for LSAT)	3
PHI 241	Ethics: Traditions in Moral Reasoning	3
PHI 261	Philosophy of Law	3

Political Science

PSC 103	The American Constitution	3
PSC 320	American Constitutional Law I	3
PSC 321	American Constitutional Law II	3
PSC 420	The Constitution, The War on Terror and Civil Liberties	3
PSC 345	Transnational Crime After 9/11	3

THE PROGRAM

Freshman Year

Introduction to the Raichle Pre-law Center

Attend New Student Orientation Program Session (Fall)

Phi Alpha Delta Membership

Consider membership in Desmond Pre-Law Chapter of Phi Alpha Delta Law Fraternity (Fall induction)

Raichle Pre-Law Center

Attend Comprehensive Presentation by Raichle Center Director Robert Klump and former Director Peter Galie at which the following aspects of the law school application process and the legal profession will be addressed. All pre-law students are invited to attend (Fall)

- What is the legal profession all about?
- Varieties of practice, e.g. law firm, in-house, government.
- What opportunities does a law degree provide in addition to the practice of law?
- The current state of the legal job market.
- The cost of attending law school and financing law school education.
- Building a resume that will help get you into law school.
- Choosing a curriculum that will be attractive to law school admissions committees.
- Internship opportunities.
- The LSAT (Law School Aptitude Test): how to prepare; when to take.

Sophomore Year

Phi Alpha Delta Membership

Consider membership in Desmond Pre-Law Chapter of Phi Alpha Delta Law Fraternity *Fall induction*

Course Selection

Consider pre-law Recommended Electives in selecting courses *Fall/Spring*

Pre-Law Scholarship Competition

Sophomores satisfying eligibility requirements may apply for a partial pre-law scholarship for their junior year; several scholarships are awarded on a competitive basis by the Pre-Law Committee *Spring*

Junior Year

Course Selection

Consider pre-law Recommended Electives in selecting courses *Fall/Spring*

Pre-Law Scholarship Competition

Juniors satisfying eligibility requirements may apply for a partial pre-law scholarship for their senior year; several scholarships are awarded on a competitive basis by the Pre-Law Committee (Spring)

Internships

Juniors interested in doing a law-related internship during the summer preceding senior year should submit an application and supporting materials to the Director *Spring*

Getting into Law School

A Strategy for Success

A service provided by the Raichle Pre-Law Center consisting of one-on-one counseling during the Spring semester on the law school application process, including the following topics:

- Selecting the right law school.
- Applying to law school including early admissions.
- Preparing for the LSAT, including course offered on campus by Kaplan.
- Writing the personal statement.
- Updating resumes.
- Obtaining letters of recommendation.

Senior Year

One-one-one advisement sessions on the law school application process, including: whether and when to retake the LSAT; strategies for enhancing chances for admission at particular schools; negotiating scholarship and financial aid offers; selecting which law school to attend. *Fall/Spring*

The following courses are available as options for any student, particularly those interested in legal careers.

LEG 101 Mock Trial

1 Credit

Acquire knowledge of trial proceedings, rules of evidence and courtroom skills necessary to qualify for Mock Trial team membership; prepare for and compete in Mock Trial tournaments. Students may take this class up to 4 times for credit.

Prerequisite: permission of instructor.

Offered: fall & spring.

LEG 201 Legal Reasoning, Writing and Advocacy

2 Credits

Examine process and techniques which lawyers use to advocate effectively in the American legal system. Analyze the art of legal argument, decision-making and reasoning. Draft legal briefs and memoranda, including use of precedent.

Offered: occasionally.

Pre-Medical and Pre-Health Professions

Program Director: Allyson D. Backstrom, PhD

INTRODUCTION

The Dr. George E. Schreiner '43 Pre-Medical Center has been established to enhance the quality of the undergraduate experience for students who wish to enter the many fields of medicine and the health professions including medicine (allopathic and osteopathic), dentistry, podiatry, optometry, physician assistant, pharmacy, and veterinary medicine among others. The Pre-Medical Center supports students through one-on-one advising, hosting seminars to assist students learning about various health careers and professional schools, connecting students with shadowing and volunteer activities, and assisting students with the application process to gain entry into professional schools. It is important to understand that Pre-Med/Health Sciences is a support program and not an academic major. Students interested in careers in medicine and other health professions frequently major in biology, chemistry or biochemistry, however, students may major in any academic area. Pre-Med/Health students have recently majored in psychology, mathematics, English and philosophy among others. Further information can be found in the catalog sections for each major. Along with the academic major requirements, students complete specific course requirements for the health professional schools of choice. All programs require a broad liberal arts education which is achieved through the Core Curriculum. Specific requirements vary from one professional school to another so it is important for students to utilize the advising services of the Pre-Medical Center beginning in their first college year. For a more detailed description of the program please go to the Pre-Med/Pre-Health website (<https://www.canisius.edu/academics/programs/pre-medical-and-pre-health-professions>).

ADVISEMENT

All pre-med/pre-health students should register with the PreMed Center upon arrival at Canisius their freshman year. Additionally, students who develop an interest in the health professions after matriculating at Canisius are able to register with the PreMed Center at any time. Pre-med advisors assist students in all aspects of their preparation for entry into the health professions and serve in addition to Griff 101 and major advisors. All students should work closely with the advisor in their major and the Pre-Med Advisor in discussing career expectations, choosing major electives, developing their entire academic program, and planning co-curricular or supplemental academic experiences. This process should start in the first college year. The PreMed advisors assist students in completing appropriate documentation each year to maintain good standing in the pre-med/pre-health program.

QUALIFICATIONS

To meet minimal requirements for most health professions, students must maintain a minimum GPA of 3.0. Students with a GPA lower than this should contact the Pre-Med Advisor for assistance. Higher GPAs are needed to be competitive applicants for most health professions with many programs looking for a GPA of 3.6. Competitive scores on professional exams (MCAT, DAT, GRE, PCAT, OAT, etc.), demonstrated commitment to serving others, and thorough exploration and understanding of the desired profession are also critical. Full understanding of the profession includes multiple shadowing experiences with different professionals over time and clinical volunteer experiences. The Pre-Medical Center will help students plan appropriately for each of these qualifications.

EARLY ASSURANCE AND JOINT DEGREE PROGRAMS

Canisius College maintains relationships with health professional programs allowing students to gain early acceptance into medical, dental, pharmacy, optometry, and veterinary programs among others. Relationships with professional schools also allow for students to be admitted into joint programs upon enrolling at Canisius as freshmen or during the first college year. These programs are competitive and appropriate for the highly motivated student who has thoroughly explored the health professions to develop an understanding and commitment to their chosen profession. Depending on the program, an outstanding high school record or early record in college is required. Please visit the Pre-Medical Center for the most up-to-date details on the various programs.

Early Assurance Program

Pre-Medical Early Assurance programs at Canisius are offered in conjunction with the State University of New York Upstate Medical University in Syracuse, and the Lake Erie College of Osteopathic Medicine (PA and FL campuses). Pre-Dental Early Assurance programs are offered in conjunction with the State University of New York at Buffalo School of Dental Medicine and LECOM School of Dental Medicine (Bradenton, FL). Pre-Pharmacy Early Assurance Programs are offered in conjunction with the State University of New York at Buffalo School of Pharmacy and LECOM School of Pharmacy (PA and FL campuses).

Joint Degree Programs

Canisius College has six- and seven-year joint degree programs with the following professional schools; University at Buffalo School of Dental Medicine, Lake Erie College of Osteopathic Medicine, University at Buffalo School of Pharmacy, LECOM School of Pharmacy, the SUNY State College of Optometry, among others. The first three years are spent at Canisius and the last three or four years at the professional school. A bachelor's degree (BS) will be awarded from Canisius College after completion of the first professional year of dental, pharmacy, osteopathic, or optometric school. The DDS, DO, PharmD, OD or other appropriate professional degree will be awarded at the end of six or seven years. To remain in good standing, students must fulfill all requirements established by the professional school. University of Guelph Ontario Veterinary College has also reserved seats for Canisius students.

Pre-Medicine

INTRODUCTION

Students interested in a career in allopathic (MD) or osteopathic (DO) medicine have the option of completing a four-year degree in any major along with completing specific prerequisites. Medical school admission is

very competitive and students should work closely with the Pre-Med Advisor throughout their college years to stay on track with both academic and co-curricular preparation. Students should gain clinical experience through hospital volunteerism and shadowing physicians. Academic admission requirements vary somewhat by medical school. The new Medical College Admission Test (MCAT) exam that was implemented in 2015 includes some content from courses not specifically required by all medical schools. Students must complete coursework that both satisfies medical school requirements and also prepares them to score well on the MCAT. In addition to the information in this section, please check the general information at the pre-medical and pre-health section of the catalog (p. 54).

JOINT AND EARLY ASSURANCE PROGRAMS

Canisius College students may apply to Early Assurance programs (4+4) at the State University of New York Upstate Medical University in Syracuse and the Lake Erie College of Osteopathic Medicine (PA and FL campuses). Students apply to the Upstate program during the sophomore year. Students may apply to the LECOM program during the freshman or sophomore year. Highly qualified students may be admitted to the LECOM joint seven-year (3+4) program upon enrolling at Canisius as freshmen. A six-year (3+3) primary care physician pathway is also available through LECOM. Students may also apply into the LECOM joint programs during the freshman year. Students in the LECOM programs with the appropriate academic indices are not required to take the MCAT.

RECOMMENDED PRE-MEDICAL COURSES

Recommendations include those courses needed to meet most medical school requirements and to prepare for the MCAT 2015 exam. Students must consult individual medical schools for additional specific requirements. The PreMed Center has resources to help students in this process.

English

One year of English composition (FYS 101 and ENG 101) or the Honors Program equivalent.

Biology

At least one year of general biology with laboratory:

BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4

Chemistry

One year of general chemistry and one year of organic chemistry with laboratories:

CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4

Biochemistry

Students may take biochemistry in either the Biology Department (BIO 211-BIO 212, take both courses) or the Chemistry Department (BCH 301-BCH 302, take either one or preferably both courses).

Physics

One year of introductory physics with laboratory:

Select one of the following:

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Option 1:

PHY 201 & 201L College Physics I and College Physics I Laboratory

PHY 202 & 202L College Physics II and College Physics II Laboratory

Option 2:

PHY 223 & 223L General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory

PHY 224 & 224L General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory

Mathematics

Math requirements vary at the different medical schools. Many of the more competitive medical schools require one year of college level math. Some require calculus, some require statistics. The MCAT utilizes statistics typically learned through science courses. We recommend students take a minimum of one semester of statistics (MAT 141 or PSY 201) and strongly encourage students to also take one semester of calculus (MAT 111 or MAT 109/MAT 110). Chemistry majors must take MAT 141.

Behavioral/Social Science

One semester each of psychology (PSY 101 or PSY 102) and sociology (SOC 110). Some medical schools require more than two courses in the behavior/social sciences. The MCAT 2015 will include content from PSY 101, PSY 102 and SOC 110. If a student does not take both PSY 101 and PSY 102, they may learn some psychology content independently.

Pre-Optometry

INTRODUCTION

Students interested in a career in Optometry have the option of pursuing any major along with completing specific prerequisites. Optometry schools typically require a minimum of 90 credit hours be completed at the undergraduate level and many prefer the bachelor degree be completed. Students must gain a thorough understanding of the profession through a range of shadowing experiences and earn a competitive score on the Optometry Admission Test (OAT). Students should work with the Pre-Med Advisor beginning in the first college year to select appropriate coursework based on their schools of interest, and co-curricular experiences. In addition to the information in this section, please check the general information at the pre-medical and pre-health section of the catalog (p. 54).

JOINT AND EARLY ASSURANCE PROGRAMS

Canisius College maintains a relationship with SUNY College of Optometry which allows students to gain early acceptance into optometry school.

Highly qualified students may be admitted into this 3+4 program upon enrolling at Canisius as freshmen or during the freshman or sophomore year.

RECOMMENDED PRE-OPTOMETRY COURSES

Academic admission requirements vary by optometry school, but usually include the following courses:

English

One year of English composition (FYS 101 and ENG 101).

Biology

At least one year of general biology with laboratory:

BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4

Chemistry

One year of general chemistry and one year of organic chemistry with laboratories:

CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4

Physics

One year of introductory physics with laboratory:

Select one of the following:

8

Option 1:

PHY 201 & 201L College Physics I and College Physics I Laboratory

PHY 202 & 202L College Physics II and College Physics II Laboratory

Option 2:

PHY 223 & 223L General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory

PHY 224 & 224L General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory

Mathematics

One semester of statistics (MAT 141 or PSY 201) and one semester of calculus (MAT 111). Chemistry majors must take MAT 141. Some optometry schools suggest one year of calculus (MAT 111-MAT 112).

Psychology

One semester of psychology (PSY 101 or PSY 102).

Social Science and Humanities

Two courses. Sociology (SOC 110) is recommended.

ADDITIONAL PRE-OPTOMETRY COURSE SUGGESTIONS

Biochemistry

Students may take biochemistry in either the Biology Department (BIO 211-BIO 212, take both courses) or the Chemistry Department (BCH 301-BCH 302, take either one or both courses).

Microbiology

One semester of microbiology (BIO 307).

Anatomy & Physiology

One semester of anatomy and physiology (BIO 114).

Pre-Pharmacy INTRODUCTION

Students interested in a career in Pharmacy have the option of completing a four-year degree in any major along with completing specific prerequisites or completing only two or three years of study before starting pharmacy school, as long as the required courses are taken. Students should stay in contact with the Pre-Medical Center from their first college year for assistance in planning appropriately for entry into pharmacy schools. Most students at Canisius College choose the 4-year option majoring in either Chemistry (Health Professions Track), Biochemistry, or Biology. Majoring in other academic areas is also possible. Further information can be found in the catalog sections for each of those departments. Competitive students generally have a GPA of at least 3.3-3.5. Students must gain a thorough understanding of the pharmacy profession that includes shadowing or work experience in a pharmacy. Students must also earn competitive scores on the PCAT (Pharmacy College Admissions Test.) In addition to the information in this section, please check the general information at the pre-medical and pre-health section of the catalog (p. 54).

JOINT AND EARLY ASSURANCE PROGRAMS

Canisius College has a seven-year (3+4) joint degree program with State University of New York at Buffalo School of Pharmacy and Pharmaceutical Sciences, and both six- (3+3, PA campus) and seven-year (3+4, FL campus) joint degree programs with Lake Erie College of Osteopathic Medicine School of Pharmacy. These programs allow students to earn both the bachelor degree from Canisius College and the Doctor of Pharmacy degree from the partner institution. In these programs, students complete the Core Curriculum and three years of the Chemistry Health Track major (courses approved by the chair of the Chemistry Department) or the Biology major (courses approved by the chair of the Biology Department). After the first year of pharmacy school, the bachelor degree is awarded by Canisius. Students also have the option to apply to a wide range of pharmacy schools under the 3+4 program. For more information regarding these programs contact the Pre-Med Advisor.

RECOMMENDED PRE-PHARMACY COURSES

Academic admission requirements vary substantially by pharmacy school, but usually require the following courses:

English

One year of English composition (FYS 101 and ENG 101).

Biology

At least one year of general biology with laboratory (BIO 111-BIO 112). Most schools also require at least one year of Human Biology; Introduction to Human Anatomy and Physiology and Musculoskeletal Anatomy and Physiology with laboratory (BIO 114-BIO 115). Many programs also require Microbiology with laboratory (BIO 307).

Chemistry

One year of general chemistry and one year of organic chemistry with laboratories:

CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4

Many schools also require Biochemistry (BCH 301 or BIO 211-BIO 212)

Physics

One semester or one year of introductory physics with laboratory:

Select one of the following:		8
Option 1:		
PHY 201 & 201L	College Physics I and College Physics I Laboratory	
PHY 202 & 202L	College Physics II and College Physics II Laboratory	
Option 2:		
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	

Check schools of interest for the number of semesters required.

Mathematics

One or two semesters of Calculus (MAT 111 and MAT 112) and one (1) semester of statistics (MAT 141 or PHY 201). Some of the more competitive schools require one year of college level calculus. Chemistry majors only MUST take MAT 141.

Humanities and/or Social/Behavioral Science

One to four semesters of psychology, sociology, anthropology, U.S. history, theology and/or philosophy. Some programs specifically require psychology.

Public Speaking

One semester of oral communications (COM 201)

Economics

One semester of macroeconomics (ECO 101) or microeconomics (ECO 102). Some programs specifically require ECO 102.

Pre-Veterinary Medicine

INTRODUCTION

Students interested in a career in Veterinary Medicine have the option of pursuing a major in any discipline along with completing specific prerequisites. Due to the significant biology requirements, most students pursue a major in this area. Veterinary medicine pre-requisites vary significantly from school to school. Students should work with the Pre-Medical Center to identify schools of interest and meet appropriate requirements. In addition to specific coursework, pre-vet students must gain significant experience with animals and shadow veterinarians. Students should participate in the local Veterinary Explorers organization. In addition to the information in this section, please check the general information at the pre-medical and pre-health section of the catalog (p. 54).

JOINT AND EARLY ASSURANCE PROGRAMS

Canisius College enjoys reserved seats for our students through a Memorandum of Understanding with Ontario Veterinary College at the University of Guelph. Visit the Pre-Medical Center for additional details.

RECOMMENDED PRE-VETERINARY COURSES

Academic admission requirements vary substantially by veterinary medical school, but usually include the following courses:

English

One year of English composition (FYS 101 and ENG 101).

Biology

At least one year of general biology with laboratory:

BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4

Chemistry

One year of general chemistry and one year of organic chemistry with laboratories:

CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4

Biochemistry

One semester of biochemistry. Students may take biochemistry in either the Biology Department (BIO 211-BIO 212 take both courses) or the Chemistry Department (BCH 301-BCH 302 take either one or both courses).

Physics

One year of introductory physics with laboratory:

Select one of the following:

8

Option 1:	
PHY 201 & 201L	College Physics I and College Physics I Laboratory
PHY 202 & 202L	College Physics II and College Physics II Laboratory
Option 2:	
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory

Mathematics

One semester of statistics (MAT 141 or PSY 201). Some veterinary schools require more math such as calculus (MAT 111).

Additional Pre-Veterinary Course Suggestions

One semester of genetics (BIO 405) and one semester of microbiology (BIO 307).

The Urban Leadership Learning Community (ULLC)

Co-Directors: E. Roger Stephenson, PhD and Christian Blum, PhD

The Urban Leadership Learning Community (ULLC) enables the best and brightest students from Greater Buffalo to enroll in a unique educational opportunity at Canisius. The ULLC offers students a four-year program to help create the next generation of leaders in Buffalo and Western New York from a population that historically has been denied positions of influence or power in Buffalo. The program provides its students with partial and full scholarships to cover tuition, room and board and fees. Moreover, through its many activities throughout a student's undergraduate career, the program fosters academic excellence, extra-curricular involvement and service to others, all through collaboration. ULLC students consider each other "family" who cooperate rather than compete with each other.

The ULLC enrolled its first class in Fall 2000 and experiences an impressive 80% four-year graduation rate. 154 ULLC students have graduated since 2004, and currently there are 38 ULLC students pursuing undergraduate degrees in a wide-range of majors.

Graduates have gone on to graduate programs and professions in education, medicine, business and social work or are employed in a variety of occupations.

ULLC students take a number of "Team Learning" courses, non-lecture courses in a range of disciplines. The TL courses are writing intensive and emphasize a number of "levels of engagement" with course materials to promote "mastery" through teamwork. The leadership activities that

ULLC students participate in are many and varied and include: a Leadership Workshop Series, four workshops that investigate and apply leadership concepts to the demands of careers and good citizenship; a Summer Leadership Training Program for incoming freshmen, two weeks of intensive preparation for the demands of college life; the ULLC Council, class representatives to plan and promote program activities, such as the Annual Banquet, the Senior Reception, the Parent Reception and the Program Blog. All ULLC students participate in one or more internships either related or ancillary to their career plans.

In addition, ULLC students travel to the Shakespeare Festival in Stratford, Ontario, annually; they hold offices in a wide range of campus activities; many of them study a semester abroad; and many participate in the Winter Service Week and Alternate Spring Break opportunities offered by the Office of Campus Ministry.

For further information, please contact Dr. E. Roger Stephenson (stephene@canisius.edu) (716-888-2655) or Dr. Christian Blum (blum2@canisius.edu) (716-888 2650).

Academic Policies

ACADEMIC POLICY RESOURCE

Students with questions regarding academic policies or those seeking advice on handling situations related to grade grievances or violations of the code of academic integrity may wish to speak to someone outside the normal decision and appeal processes. Students are welcome to contact an advisor in the Griff Center for Academic Engagement or the associate vice president for academic affairs for an explanation of academic policies or general assistance in these matters.

- Code of Academic Integrity (p. 59)
- Grades and Policies (p. 62)
- Quality Points and GPA (p. 64)
- Academic Standing (p. 64)
- Academic Forgiveness Policy (p. 65)

Code of Academic Integrity

• Mission and Pledge

The Canisius College community is dedicated to academic excellence and is, therefore, committed to establishing and maintaining an atmosphere of trust. All members of the community agree and pledge to exercise complete integrity in their academic work. Academic integrity is the foundation of true intellectual growth; it demonstrates respect for oneself and for others.

The students, faculty and administration of Canisius College understand their responsibility for maintaining academic integrity to be both individual and collective. Fulfilling this responsibility requires us to uphold high standards in our own conduct and to exercise fairness towards each other. All instances of academic dishonesty are a breach of community standards. Students, administrators and staff, course instructors and their representatives are expected to report violations of the Code of Academic Integrity.

All members of the Canisius College community are committed to administering the Code of Academic Integrity in a manner consistent with our mission: to teach responsibility, to foster learning and to care for the intellectual and ethical development of the whole person.

Violations of the Code of Academic Integrity shall be dealt with in a manner which is just to all parties and contributes to the learning process. Sanctions shall be shaped by the belief that infractions are not simply occasions for punishment, but are opportunities for learning and for improving the ethical standards of the individual and the community.

All Canisius College students are automatically bound by the Code of Academic Integrity. As a reminder and reinforcement of the ideals this code embodies, course instructors are asked to place a pledge on scheduled tests and assignments, as well as in the course syllabus. Students, in turn, are asked to carefully consider and sign the pledge, which reads:

“As a member of the Canisius College Community I understand and will uphold the standards for academic behavior as stated in the Code of Academic Integrity.”

• Standards for Academic Behavior

A. Prescriptions

Academic integrity requires a commitment to five fundamental values: honesty, trust, fairness, respect, and responsibility.

1. Honesty

As an academic community of integrity, Canisius College requires intellectual and personal honesty in learning, teaching, research, and service. Honesty is the prerequisite for full realization of trust, fairness, respect, and responsibility. The policies of Canisius College discourage dishonesty in the forms of cheating, lying, fraud, theft, and other behaviors that jeopardize the rights and welfare of the college community and diminish the worth of its academic degrees. All members of the community subscribe to the principle of observing basic honesty in their work, words, ideas, and actions.

2. Trust

As an academic community of integrity, Canisius College seeks to foster a climate of mutual trust, encourage the free exchange of ideas, and enable all members of the community to reach their highest potential. Trust creates an environment in which collaboration is valued and information and ideas can be shared without fear of one's work being stolen. It also allows us to believe in the social value of our scholarship and the degrees that are achieved here.

3. Fairness

As an academic community of integrity, Canisius College seeks to set clear standards, practices and procedures, and expects fairness in the interactions of all members of the community.

4. Respect

As an academic community of integrity, Canisius College recognizes the participatory nature of the learning process and honors and respects a wide range of opinions and ideas. If they are to be rewarding, teaching and learning demand both active engagement and mutual respect among all members of the community. Respect is shown by attending class, being on time, paying attention, listening to other points of view, valuing the aspirations and goals of others and recognizing them as individuals, being prepared and contributing to discussions, meeting academic deadlines and performing to the best of one's ability.

5. Responsibility

As an academic community of integrity, Canisius College upholds personal accountability and depends upon action in the face of wrongdoing. Every member of the academic community is responsible for upholding the integrity of the scholarship and research carried out here. Such shared responsibility leads to personal investments in upholding our academic integrity standards. Being responsible means taking action against wrongdoing, discouraging and seeking to prevent misconduct by others. One primary responsibility is to discourage violations of the Code of Academic Integrity by others.

B. Proscriptions

All students of the college are expected to understand the meaning of the Code of Academic Integrity. Ignorance of the code is not a valid reason for committing an act of academic dishonesty. Students should realize that their actions may affect other students. In general, students may not obstruct or interfere with other students' academic work or otherwise undertake an activity with the purpose of creating or obtaining an unfair academic advantage over other students. Each of the following behaviors violates all of the principles of honesty, trust, fairness, respect, and responsibility explained above and is thus prohibited.

1. Plagiarism — what about copying from the Internet and citing someone else?

Plagiarism is using someone else's work without citing the source. Of course, common sense as well as ethics should determine what you document. For example, you rarely need to give sources for familiar proverbs ("You can't judge a book by its cover"), well-known quotations ("We shall overcome"), or common knowledge ("George Washington was the first president of the United States"). But you must indicate the source of any appropriated material that readers might otherwise mistake for your own (5th Edition, pp. 30, 33). Plagiarism may range from isolated formulas, sentences, or paragraphs to entire articles copied from books, periodicals, websites, speeches, or the writings of other students. Honesty requires that any work or materials taken from another source, for either written or oral use, must be acknowledged. Any student who fails to give credit for ideas or materials obtained from another source is guilty of plagiarism. Plagiarism, in any of its forms, whether intentional or unintentional, violates standards of academic integrity. Examples of plagiarism include, but are not limited to:

- Direct quotation of any source material whether published or unpublished without giving proper credit through the use of quotation marks, footnotes and other customary means of identifying sources. This includes complete sentences or paragraphs, or an entire piece of written work.
- Paraphrasing another person's ideas, opinions, or theories from books, articles, websites, etc., without identifying and crediting sources.
- Borrowing facts, statistics, graphs, diagrams, photographs, or other illustrative or visual materials that are not clearly common knowledge without identifying and crediting sources.
- Copying another student's essay test answers.
- Submitting papers written by another person or persons. This includes copying, or allowing another student to copy, a computer file that contains another student's assignment and submitting it, in part or in its entirety, as one's own.
- Working together on an assignment, sharing the computer files and programs involved, and then submitting individual copies of the assignment as one's own individual work without course instructor approval.
- Buying or selling, or exchanging term papers, examinations, or other written assignments, or any part of them.
- Offering false, fabricated, or fictitious sources for papers, reports, or other assignments.

2. Cheating

Cheating includes, but is not limited to: using unauthorized notes, study aids, or information on an examination, test, etc.; altering a graded work after it has been returned, then submitting the work for regrading; or allowing another person to do one's work and submitting that work under one's own name. Cheating also includes the possession, without authorization, of copies of tests, answer sheets, or other materials, however obtained, that could interfere with fair, accurate testing, as well as retaining, possessing, using or circulating previously given examination materials without authorization.

3. Duplicate Submission of the Same Work

Submitting the same work for more than one course is a violation unless the professor(s) assigning the work gives consent in advance. This includes work first produced in connection with classes at either Canisius College or other institutions attended by the student.

4. Collusion

Collusion includes cooperation that results in the work or ideas of others being presented as one's own (e.g., rather than as a group effort). However, ordinary consultation of faculty, library staff, tutors or others is legitimate unless the instructor has imposed stricter limits for a particular assignment.

5. False Information and Lying

This includes consciously furnishing false information to other students, faculty members and their representatives, advisors, administrators or representatives of the college offices with the intent to mislead. Instances would include but are not limited to misrepresenting activity outside of the classroom (reports on field work, internships, etc.) or improperly seeking special consideration or privilege (e.g., for postponement of an examination or assignment deadline, etc.).

6. Falsifying Academic Documentation and Forgery

This includes any attempt to forge or alter academic documentation (including transcripts, letters of recommendation, certificates of enrollment or good standing, registration forms, drop/add forms, withdrawal forms, and medical certification of absence) or to falsify other writing in academic matters (e.g., any documentation provided to instructors) concerning oneself or others.

7. Theft, Abuse, and Destruction of Academic Property

This comprises unauthorized removal, retention, mutilation, or destruction of common property of the college that

deprives others of equal access to these materials. Such property includes but is not limited to library materials, laboratory materials, computers and computer software, etc. This includes also sequestering library materials for the use of an individual or group; a willful or repeated failure to respond to recall notices from the library; and the removal or attempt to remove library materials from the library without authorization. The theft, mutilation, or destruction of another student's academic work, including books, notes, computer programs, papers, reports, laboratory experiments, etc. also falls under this type of violation.

8. Unauthorized Use of Information Technologies

In the context of the completion of a course and/or assignments (contained within a course), the unauthorized use of computers or the college's computer network (e.g., the unauthorized use of software, access codes, computing accounts, electronic mail, and files) or other electronic devices (calculators, smart phones, iPods/iPads, tablets etc.) is prohibited.

9. Aiding and Abetting Academic Dishonesty

This includes intentionally: (a) providing material, information, or other assistance to another person with knowledge that such aid could be used to commit any of the proscribed acts noted above; or (b) providing false information in connection with any inquiry regarding academic integrity.

• Procedures for Adjudicating Violations of the Code of Academic Integrity

A. Initial Procedure

The course instructor meets with the student to discuss the incident. The student will be informed of the course instructor's suspicions. The student may respond to the allegations and may bring witnesses, if deemed pertinent by the instructor.

The instructor decides whether the student has violated the Code of Academic Integrity and, if necessary, assigns a sanction. This determination of responsibility shall be based upon the facts of the incident and whether it is more likely than not that the student is responsible for the alleged violation(s).

The student shall be provided written notification of the instructor's decision and sanction, normally within five business days. Possible sanctions include:

- Warning: a notice in writing to the student that the student has been found responsible for violating the Code of Academic Integrity;
- Grade Reduction or Course Failure;
- Discretionary Sanctions: work assignments, community service, participation or completion of college service or program, service to the college and/or other related discretionary assignments;
- Educational Program or Project: participation in, or completion of, a program or project specifically designed to help the student understand why the academic integrity violation was inappropriate.

If a sanction is imposed the course instructor is expected to file a "Notification of Academic Dishonesty" form with the appropriate associate dean. Forms are available in all associate dean offices and in other campus offices. The form, the sanction, and supporting

documentation become part of the academic misconduct file shared by the associate deans of Arts and Sciences, the School of Education and Human Services, and the Wehle School of Business. The academic misconduct file is separate from the student's permanent academic file and confidential. First violations of the Code are a part of this confidential record. Second violations are handled on a case-by-case basis and will become part of the student's academic file only in those instances when subsequent offenses are serious enough to warrant inclusion.

B. Appeal

The student may request, in writing, a review of the course instructor's decision by the appropriate associate dean. The written request from the student must be submitted to the associate dean not more than five business days after the student is notified of the course instructor's decision. The associate dean shall review the decision and meet with the student to discuss the matter. If the student chooses, an advisor of choice may be present during the appeal. The student is responsible for identifying an advisor of choice and notifying the associate dean that an advisor will be present for the appeal. If an appeal is granted, the associate dean may replace the sanction with another that may be more severe, less severe, or otherwise different. The associate dean may impose any sanctions found in Article IV, Section C of the Community Standards except grade change or course failure.

Depending on the individual case, the associate dean may request that the course instructor reconsider the original decision and/or sanction. In very serious cases or when a pattern of academic dishonesty is documented, the associate dean may direct the case to be adjudicated through a Community Standards hearing panel process. If the associate dean is the course instructor or has acted in the course instructor's place, the appeal shall be submitted to the dean of the school in which the course is offered.

C. Hearing Panel

When a case of academic dishonesty is very severe or a documented pattern of violations of the Code of Academic Integrity exists, the associate dean may refer the case to the Dean of Students to be adjudicated through a Community Standards hearing panel. Normally, the associate dean refers the case to the Dean of Students when the violation might merit one of the following sanctions: a notation on the official transcript, probation, suspension, expulsion, or degree revocation. However, the associate dean may choose to hear any case without referring it to the Dean of Students and may then impose any sanctions found in Article IV, Section C of the Community Standards except grade reduction or course failure. Hearing procedures for alleged violations of the Code of Academic Integrity shall operate according to the procedures outlined in Appendix C Hearing Procedures of the Community Standards. However, appeals shall be directed to the Vice President for Academic Affairs.

D. Failure to Appear

The judicial process outlined above is intended to provide the student an opportunity to respond to allegations of violations of the Code of Academic Integrity, thereby enabling the course instructor or associate dean to make an informed decision about responsibility and appropriate sanctions. However, if a student fails to respond to three communications (in the form of written notification, telephone, e-mail, or oral requests) attempting to schedule a meeting, or fails to attend

a scheduled meeting, a decision based upon available information may be rendered in absentia.

E. Records

“Notification of Academic Dishonesty” forms and proceedings records shall be maintained confidentially in a central location until five years after the responsible student graduates or permanently separates from Canisius College. In cases where notation on the official transcript, suspension, or expulsion is imposed, the file shall be retained as part of the student’s permanent academic record.

A course instructor who suspects academic dishonesty may ask the associate dean about the student’s prior record in this area. Anyone other than the course instructor suspecting a violation is expected to inform the course instructor or proctor at the earliest possible opportunity, even while the suspected violation is being committed. In the absence of the course instructor, the associate dean will receive reports of violations and will replace the course instructor in the following procedures. “Associate dean” refers throughout to the associate dean of the school to which the course belongs.

The complete text of the Community Standards judicial policies, procedures, and sanctions can be found in the Canisius College Student Handbook.

Portions of this policy were adapted with permission from the University of Scranton, Loyola College in Maryland, and Georgetown University.

Grades and Policies

Grades inform students of the level of performance they have achieved in a course. Grades are means whereby students may come to know and appreciate their capacities and abilities. Instructors are responsible for specifying the performances required in their courses; students are responsible for meeting the requirements specified.

Grades earned by students at Canisius College reflect:

1. The extent to which the requirements specified in the course syllabus have been met.
2. The degree to which the requirements completed exhibit mastery of the subject or skills which are the object of the course.
3. Other criteria specified by the instructor at the beginning of the course, criteria such as, but not limited to, attendance at lectures or other course functions, projects voluntarily undertaken in excess of specified requirements, correct use of oral or written English and contribution to discussion or other course activities.

Grades earned by undergraduate students include the following:

A	Superior performance.
A-	
B+	
B	Good performance.
B-	
C+	
C	Adequate performance.
C-	
D	Poor, but passing, performance.
F	Failing performance.

FX	Failure due to excessive absences or unauthorized absence from the final examination.
P or U	P-Passing. U-Failing. The description of the Pass/Fail program is given later in this chapter.

Grades authorized by the deans include the following:

W	Authorized Withdrawal from a course. The description of withdrawal procedures is in a preceding section of this chapter.
I	Incomplete. A student who has failed to fulfill all requirements of a course may petition the instructor to request an incomplete grade. The request must be approved by the instructor and then the appropriate associate dean. An incomplete grade will be granted for only serious and well-defined reasons.
NG	No grade submitted by the course instructor

Final grades are available on the college’s online services page at the conclusion of each semester. If an official grade report is needed for any reason, contact the Student Records and Financial Services Center to request a grade report.

Final course grades cannot, in normal circumstances, be altered after they have been recorded on the student academic record. Should an exceptional reason occur that would justify a late grade change, the faculty member can submit to the appropriate associate dean a request to change a student’s recorded grade within the following time frame:

- The end of the spring semester following a course taken in the fall
- The end of the fall semester following a course taken in the summer
- The end of the fall semester following a course taken in the spring

Any request for a grade change after these deadlines must be submitted to the dean of the appropriate college with documentation as to why the grade should be changed.

Students who are disputing a grade received in a course must do so under the guidelines and within the timeframes described under grade grievance procedures.

Students who are dissatisfied with their grade in a course may repeat the course once (exceptions may be approved by the appropriate associate dean in consultation with the department chair). In such cases both grades will be entered in the student’s record, but, for the purpose of computing grade point average, only the second grade will be used for the calculation. Because retaking courses that have already been passed (any grade of D or above) affects a student’s financial aid, students should consult with the Student Records and Financial Services Center and their academic advisor before retaking any courses.

INCOMPLETE GRADE

A student who, for serious and well defined reasons, has failed to fulfill all requirements of a course or has failed to take the final exam may petition

the course instructor to request from the appropriate associate dean, a grade of "I", indicating "Incomplete Performance."

Only the appropriate associate dean may grant an incomplete grade request. It will not be granted to a student whose only reason is excessive absence during the semester or failure to complete the work of the course before the close of the semester without an exceptionally good reason. Examples of such good reasons might be prolonged illness or hospitalization during the semester, serious illness at the time of the final examination, or other unusual circumstances.

An incomplete grade, when granted, is merely temporary and will automatically be changed to an "FX" grade if a final grade is not submitted by March 1 for the fall, August 1 for the spring and October 1 for the summer.

PASS-FAIL PROGRAM

Seniors and juniors are eligible to elect one course each semester not to exceed four courses total for which they will receive a grade of either "Pass, P grade" or "Fail, U grade." The purpose of this plan is to enable upperclassmen to take more difficult courses than they would normally take for fear of lowering their grade point average.

The program is as follows:

1. Juniors and seniors who have completed at least 30 hours at Canisius may elect one course each semester, not to exceed a total of four courses in their college careers, for which they will receive a recorded grade on their transcript of either "Pass" or "Fail."
2. This course must be a free elective in the student's degree program.
3. Within one week after the semester begins, the student must file a request for "Pass-Fail" grading. Application forms may be found in the Student Records and Financial Services Center. If the registrar determines that the course meets the requirements to be taken pass-fail, grades will still be assigned for all work done during the course and on the final examination. A final grade will be entered for the student by the instructor. If this grade is "D" or above, the registrar will record a pass (P grade) for the course on the student's transcript; otherwise, he will record a failure (U grade).
4. Having received permission to take a course on the "Pass-Fail" option, a student may request, in the last week of classes and prior to exam week, that they be withdrawn from the pass-fail option and be assigned a conventional letter grade instead. This request is made at the Student Records and Financial Services Center. A student who withdraws from the "Pass-Fail" option receives the letter grade assigned by the instructor.
5. A student attaining a grade of Pass will receive full credit for this course.
6. If a student elects to receive pass or fail in a course, this course will not be counted in the grade point average. The student must carry at least four courses (12 credit hours) to be eligible for this program. Part-time students, however, are eligible with fewer than four courses.
7. This plan is entirely optional. A student may or may not elect to take advantage of it.

GRADE GRIEVANCE PROCEDURE

Occasions may arise when a student does not agree with the grade he/she has received in a course. When this happens, the question of whether the grade should be reconsidered is addressed in two stages.

I The initial stage in the grievance procedure is as follows:

- a. The student first contacts the course instructor to discuss the grade in question within four weeks of the start of the semester (regular academic session) immediately following that in which the grade was awarded. If the instructor agrees that the grade in question was inaccurate, a grade change is processed by the instructor.
 - b. If the student and the instructor cannot agree on the appropriateness of the grade in question, the student may petition the chair of the instructor's department, in writing, within ten working days after the meeting with the instructor. If a mutually agreeable decision is made through mediation conducted by the chair, the instructor will submit the agreed-upon grade and the process is completed. If there is no outcome that is mutually acceptable to the student and the instructor, the process may continue. If the instructor is also the chair, then Step 2 is omitted and the process goes to Step 3.
 - c. The student may appeal the decision to the appropriate associate dean's office within ten working days after the mediation process is complete. The associate dean shall collect written views/and other pertinent material from the involved instructor, student and chair, as well as consult with any other individuals deemed necessary. The associate dean shall render the decision whether the grade should be reconsidered.
 - d. The decision of the associate dean to reconsider or not to reconsider the grade in question is final. If the decision is to reconsider the grade, the procedure outlined in Part B below is followed. If the decision is not to reconsider the grade, the original grade cannot be changed. Cases which are referred to the procedure in Part B can be withdrawn only with the consent of the student, instructor, department chair, and associate dean after first informing all parties involved.
- II The final stage in the grievance procedure is as follows:
- a. If the associate dean feels that the reconsideration of the grade in question is appropriate, a panel of tenured faculty who have not been involved in the process described above is formed from the department in question. The panel must be formed within ten days of the associate dean's decision. If the department does not have a minimum of four members, it will be expanded to include all the tenured members of the departments within the division (Natural Science, Social Science, Humanities, Education, or Business) of which the department in question is a member.
 - b. A three-member panel will be selected as follows. The associate dean, faculty member and student involved will each select one member of the panel from the designated pool.
 - c. The panel will review all appropriate material and make a determination about the grade change. This review must be completed within thirty days of the formation of the panel. The panel has the authority to assign a grade for the course in question. That grade may be the same grade as assigned by the instructor or a higher or a lower grade, according to the panel's judgment. The student and the instructor will be informed of the panel's decision and, when applicable, the authorized grade change will be submitted to the registrar.
 - d. The decision of the panel may be appealed by the original instructor or the student to the vice president for academic affairs only in the following extraordinary circumstances:
 - i The grade grievance procedure was not followed.
 - ii Prejudice was manifested against either the student or the instructor.
 - iii New, relevant information was introduced.

The appeal must be brought within thirty days of the panel's decision. The burden of proof for the appeal rests with the individual bringing the appeal.

- e. If the vice president for academic affairs believes that the decision of the panel should be reviewed, a three-member appeal panel will be appointed from the pool of tenured faculty as described in Step B-1. The vice president, the faculty member and the student involved will each select one member. No member of the original panel may serve on the appeal panel. The appeal panel will follow the procedure in Step B-3, including completion of its task within thirty days of the formation of the panel. The decision of the appeal panel is final.

COURSES AT OTHER COLLEGES

Students matriculating at Canisius should plan to complete all their coursework at the college. The rationale for this policy rests in the mission and philosophy of the college and in its concern for the essential unity and integrity of all aspects of the curriculum: the college core, major requirements and free electives. Permission to take courses at other colleges during the regular and summer sessions is granted by the appropriate associate dean, who will consider all aspects of the student's request, including the quality and level of the proposed course and its role in the student's program. Courses intended to fulfill major requirements must also be approved by department chairperson. Permission to take courses at other colleges must be requested on the appropriate form and in advance of taking the course.

Generally, the following guidelines apply:

1. Students are ordinarily limited to one course at another institution for every ten courses taken at Canisius.
2. Junior and senior-level major course requirements are not transferred from community colleges.
3. Courses taken at a four-year college/university will be accepted only if they are offered at a comparable level at Canisius (i.e., freshman-sophomore level/junior-senior level).
4. Students who live outside the greater Buffalo area may receive more lenient consideration in taking a summer course at another college. However, the associate dean may recommend an online web-based course as a preferred option if he/she considers it more appropriate than the off-campus course.
5. Courses used to fulfill Core Curriculum requirements should be taken at Canisius College.

STUDY ABROAD COURSE GRADES

In keeping with the college's policy on "Courses at Other Colleges," students who wish to study at the universities associated with Canisius must study through the Canisius programs. Grades earned in Canisius-affiliated study abroad programs will transfer back to the college and will be counted toward a student's grade point average.

Students who wish to study at other foreign universities or in other countries than those associated with Canisius should confer with the Study Abroad Office. If one of these programs is approved for a student to use as credit toward a Canisius degree, the credit hours will transfer back to Canisius, but the grades will not count toward a student's grade-point average.

Quality Points and GPA

QUALITY POINTS

Grades in individual courses result in quality points. Points are assigned based on the table below for each semester-hour completed. Thus the number of credits must be multiplied by the quality points per credit to determine the number of quality points earned. For example, a B in a 3-credit course will earn a student 9 quality points.

Grade A	4.0 points
Grade A-	3.7 points
Grade B+	3.3 points
Grade B	3.0 points
Grade B-	2.7 points
Grade C+	2.3 points
Grade C	2.0 points
Grade C-	1.7 points
Grade D	1.0 point
Grade F (and its equivalent)	0 points

GRADE POINT AVERAGE

The grade point average indicates the student's general scholastic average and is a measure of the quality of his or her work, just as credit hours are the measure of its extent. A student's grade point average is obtained by dividing the total number of grade quality points by the total number of credit hours earned.

Academic Standing

ACADEMIC STANDING

Academic standing is determined by the cumulative grade point average from the beginning of the student's studies at Canisius.

The following terms are used to describe a student's academic standing:

- I Academic probation: When a student's grade point average falls beneath the level indicated on the next page, he/she is placed on academic probation — a serious warning that the student's academic record at the college is unsatisfactory. It is generally not advisable for students on academic probation to take part in extracurricular activities. Varsity athletes, in addition, are governed by NCAA and regional conference regulations. Probation for two successive semesters will result in automatic academic dismissal from the college.
- II Academic dismissal: Academic dismissal results from any one of the following:
 - a. Falling below the grade point average indicated below.
 - b. Failing three courses in a single semester.
 - c. Being placed on academic probation for two successive semesters. Dismissed students may not enroll in any division of the college and must wait at least six months before applying for readmission.
- III Good academic standing: This is a term used to determine a student's eligibility for financial aid. A student who is on academic probation is generally considered to be in good academic standing. Further details may be found in the section on Financial Aid.

The grade point average levels for academic probation and academic dismissal are given as follows:

Cumulative grade point average, based on 0-30 credits:

ACADEMIC PROBATION	1.50-1.99
ACADEMIC DISMISSAL	Below 1.50

Cumulative grade point average, based on 31 or more credit hours:

ACADEMIC PROBATION	1.75-1.99
ACADEMIC DISMISSAL	Below 1.75

To be eligible for graduation, a student must have earned an overall cumulative grade point average of 2.00.

SEPARATION FROM THE COLLEGE

Each student's continued registration at the college, the awarding of academic credits and the granting of any certificate or degree are entirely subject to the disciplinary authority of the college. The college reserves the right, therefore, to enforce the regulations concerning satisfactory academic performance and, in consequence, to cancel a student's registration, to refuse academic credits or to deny a certificate or degree. Separation from the college may also be imposed as a penalty for any conduct which conflicts with the ideals of the college or damages its reputation and that of its students.

Academic Forgiveness Policy

This policy is intended to assist former Canisius College students whose grade point average is below 2.0. Education majors must have a grade of "C" or better in their education courses and have a cumulative grade point average of 2.50 or higher to be eligible to student teach. The Academic Forgiveness Policy is intended to assist students who have reapplied to the college and demonstrate personal growth and motivation to accomplish their educational goals. This policy will allow for up to thirty (30) credit hours of coursework with grades of F or FX to be removed from the calculation of the grade point average.

A period of not less than five years must have passed prior to the student's readmission to the college. The student must submit a petition for academic forgiveness with the application to the college. The appropriate associate dean will meet with the student, review the petition, and make a recommendation. No acceptance decision will be made without the recommendation of the associate dean, after the review of the petition.

The admissions office will then process the application and notify the student of the decision. Once the associate dean has made a recommendation, a memo will be sent to the Student Records and Financial Services Center indicating that the student has been approved for academic forgiveness and listing the courses affected by the approval. Each affected course will have a grade of "X" listed to indicate the course is part of the academic forgiveness policy and not included in the calculation of the grade point average. The course will remain on the student's academic transcript.

The student must maintain a minimum semester average of 2.50 and a minimum cumulative grade point average of 2.00. The student must meet with the department chair of the intended major. The department chair will review the academic record and make recommendations about what courses from five or more years ago will count toward completion of current major requirements. The student must take a minimum of ten (10) courses at Canisius College to be eligible for a degree. The student will be required to meet with the appropriate associate dean at least twice during the first semester. Progress reports will be required for students during the first semester after academic forgiveness is granted.

An agreement between the associate dean and the student will be completed in writing. The agreement will outline all the requirements for the student to be approved for academic forgiveness. This will also include, but not be limited to, the minimum semester and grade point average requirements, the required appointments for progress review, and course restrictions or limitations for the first semester. Failure of the student to meet the forgiveness agreement will result in automatic dismissal from the college.

Student Records

The Student Records and Financial Services Center maintains the official records for Canisius students. This is the center where students can address issues related to course registration; making official changes including declaring or changing majors, minors, or degree programs; and formally applying for graduation. The center is located on the first floor of Bagen Hall. The center can also be reached by mail, phone, or email (stuacct@canisius.edu).

Mailing address:
Student Records & Financial Services Center
Canisius College
2001 Main Street
Buffalo, NY 14208

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- Declaring Majors and Minors (p. 67)
- Making Changes (p. 67)
- Leaves and Withdrawal (p. 68)
- Graduation (p. 68)
- Policy on Student Records (p. 69)

Course Registration

The college year consists of two regular semesters, fall and spring, plus several summer sessions of varying lengths. Several programs offer courses in the fall and spring semester that last only a portion of the semester.

The unit of instruction is the semester hour or credit hour, which consists of one lecture period of 50 minutes (hereafter called a contact-hour) each week for the entire semester (approximately 15 weeks). In addition to the time in class, students are expected to complete approximately twice as much time outside of class working on the course and its materials.

1. The general expectation for one credit hour is one contact-hour of classroom or direct faculty instruction and a minimum of two hours of student work completed outside of the classroom each week for approximately fifteen weeks for a traditional semester, or the equivalent amount of work over a different period of time; or
2. For other academic activities (including laboratory work and other academic work leading to the award of credit hours), an amount of work at least equivalent to that required in the above definition, as determined by the College.

A course having three 50-minute class periods a week will, therefore, earn three semester hours of credit. Other meeting patterns will also fulfill the required contact time. *The number of semester credits to be earned in a given course is always indicated in the course description.*

COURSE OFFERINGS

The information listed in this catalog about course availability and when courses will be offered was provided by chairs and program directors based on their planned course offerings and are intended to provide students with guidance as they produce their schedules. However, schedules are subject to change, especially when the availability of appropriate instructors changes. Actual course offerings are listed in the online course schedule produced each semester by the Student Records and Financial Services Center.

SUMMER SESSION

The Canisius College Summer Session affords qualified graduate and undergraduate students educational opportunities of the same quality as the courses offered during the regular fall and spring semesters. Course offerings are planned especially for the following groups:

- Undergraduate students who wish to complete required courses, acquire additional credits toward a degree, or make up deficiencies.
- Transient students, graduate and undergraduate, who are pursuing degree work at other colleges and universities.

COURSE REGISTRATION RESTRICTIONS

In some departments registration in all or in some the course offerings may be restricted to majors in that department. In some instances the department chairperson may authorize registration of non-majors in the course offerings.

PREREQUISITES

Some courses have prerequisites that must be met before a student can register for the course. Prerequisites include such requirements as the successful completion of previous courses, concurrent registration in another course, permission of the instructor or chair, and specific GPA and course grade requirements. A student may not register for a course where prerequisites are indicated unless the prerequisites have been successfully completed.

Note: For two-semester courses that are listed with one title and description (e.g., BIO 111-BIO 112), it is understood that successful completion of the first semester is a prerequisite for admission to the second half of the course.

The numerical sequence used at Canisius College indicates the following: Courses numbered 100-199 and 200-299 are usually freshman/sophomore courses; 300-399 and 400-499 are usually junior/senior courses. Courses numbered 500 or higher are graduate courses.

Only students with senior standing (students having completed 90 or more credit hours) and a minimum GPA of 3.0 may petition to take one graduate course per semester. Students must obtain approval from the chair or program director of the program offering the graduate class and the chair or program director of their undergraduate major, prior to petitioning to enroll in a graduate course. Undergraduate students may only take a total of two graduate courses as undergraduates and are generally limited to courses numbered 500-599. This policy does not apply to undergraduates who are currently pursuing college-approved undergraduate and graduate curricula, who should follow the curriculum map of their program(s). In exceptional cases, students may petition to take courses at the 600-level or higher, using the same procedures. Any graduate courses taken under this policy

will appear on a student's undergraduate transcript and the grades earned will factor into the student's undergraduate grade point average.

The college reserves the right to cancel a course because of inadequate registration or for reasons that cannot be foreseen. Because of the brevity of course descriptions, further information concerning the content of each course should be obtained from the individual department.

SUBSTITUTIONS

All degree requirements must be satisfied as stated in the catalog. In some circumstances it may be necessary to make adjustments to the student's curriculum. Substitutions must be approved in writing by the appropriate person: the associate dean for the Core Curriculum and the department chairperson for the major and/or concentration requirements.

IMMUNIZATION REQUIREMENTS FOR CLASS ATTENDANCE

Measles, Mumps, Rubella

New York State law requires all students taking six or more credits, attending any classes on campus, and born on or after January 1, 1957 to provide proof of immunity against measles, mumps and rubella to the Student Health Center prior to class attendance. Students must submit proof of two doses of measles (rubeola) vaccine, one dose of rubella (German measles) vaccine and one dose of mumps vaccine, given on or after their first birthday and after 1967.

Meningitis Requirement

All students registered for 6 or more credits and attending class on campus, regardless of birth date, are required to receive information about the risk of meningococcal disease and the benefit of vaccination. Students are required to read the information and either obtain the meningitis vaccine or sign a vaccine refusal statement within thirty days of first class attendance.

Submission Dates and Non-Compliance

Health requirements, including immunization records, must be submitted before the first day of class. Non-compliance with these health requirements results in registration cancellation, removal from college housing, and inability to register with the college for future semesters. If registration is cancelled, a student may be re-registered once the health forms are submitted and deemed complete. Canisius may charge a fee for re-registration. Compliance with these health requirements is strictly enforced across the campus.

Students who are only taking online courses are generally exempted from these requirements, although some online programs have established stricter immunization requirements prior to matriculation or course enrollment and these requirements are detailed in the program descriptions in the catalog.

The Student Health Center website (<https://www.canisius.edu/student-experience/support-start/student-health/health-requirements>) has detailed information about health requirements and links to the required forms.

CROSS-REGISTRATION PROGRAM

This program is sponsored by the Western New York Consortium of Colleges. Participating colleges/universities include Alfred State College, SUNY Buffalo, Canisius College, Daemen College, D'Youville College, Empire State College, Erie Community College, SUNY Fredonia, Genesee Community College, Jamestown Community College, Medaille College,

Niagara County Community College, Niagara University, St. Bonaventure University, Trocaire College, University at Buffalo and Villa Maria College.

Cross-registration enables Canisius students to enrich their programs of study by taking specialized undergraduate courses available only at other campuses, and it provides some flexibility for meeting graduation requirements in a timely manner. During the fall and spring semesters only, full-time undergraduate students are eligible to participate in this program. Students must maintain a full time course load (12 credits minimum) at Canisius during the semester in which they cross-register. Students must abide by the rules and regulations of the institution where they are cross-registered.

Students may cross-register for only one undergraduate course per semester. Students may not cross-register for independent study or tutorial courses. Course registration is on a space-available basis only. At the end of the semester, the grade will be forwarded to Canisius by the visiting institution. The grade received will count in the Canisius grade point average. Course loads above 18 credit hours including the cross-registration course will result in additional Canisius tuition charges.

Students may only cross-register for a course that is approved. A major course must be approved by the student's major department chairperson. A core curriculum course must be approved by the appropriate associate dean. A free elective course can be approved by the cross-registration officer. Students should check with the visiting school for course-registration restrictions, for additional requirements such as proof of residency and dates and times when cross-registration will be permitted. Cross-registration during your final semester at Canisius is discouraged since this may delay your degree conferral.

The cross-registration forms are available in the Student Records and Financial Services Center located in Bagen Hall 106.

Declaring Majors and Minors

DECLARING A MAJOR

A student declares a major upon entrance to the college by filling out the "Academic Interest" section on the admission application. If students wish to change their majors, they must complete a Change of Major form in Student Records and Financial Services Center. It is the student's responsibly to make sure the record reflects their correct major, concentration or minor data.

It is extremely important that students declare the correct major, because academic advisors are assigned based on the major on file with the Student Records and Financial Services Center.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors are another option available to students to explore an area of interest. Minors generally have fewer requirements than a major - usually 5 to 8 courses. Some minors are open to all students, while others may be restricted to students in specific majors. The requirements for each minor are outlined in the appropriate departmental sections. The complete list of minors (<http://catalog.canisius.edu/undergraduate/minors>) provides links to each minor page. To declare a minor, students must complete the appropriate minor request form that must be signed by the department chair and the appropriate associate dean.

Making Changes

CHANGE IN REGISTRATION

Prior to and during the first five days of the fall and spring semesters a student is allowed to drop and add classes. However, once registration has been completed, the student must follow the program of studies shown on the official registration form. See the academic calendar for dates each semester.

CHANGE IN MAJOR

A change of major form is available in the Student Records and Financial Services Center and on *myCanisius*. The form should be completed by the student and returned to the Center. This will insure that the student's information is available to the correct academic departments.

CHANGE IN NAME, ADDRESS, AND PHONE

It is the responsibility of each student to notify the college of any change of name, address, and/or phone number. Change-of-address forms are available in the Student Records and Financial Services Center and on *myCanisius*.

WITHDRAWAL FROM A COURSE

The form is available in the Student Records and Financial Services Center and in the Griff Center for Academic Engagement. A student wishing to withdraw from a course must submit a course withdrawal form to the Student Records and Financial Services Center after obtaining the signatures as required on the form.

The instructor indicates either approval or disapproval of the student's request to withdraw. An instructor might disapprove withdrawal if there is evidence of academic dishonesty. In cases where the instructor disapproves of the withdrawal, permission to withdraw is determined by the associate dean of the student's school in consultation with the instructor of the course. Requests for withdrawal are not granted automatically, nor are they denied automatically.

The deadline for withdrawal without academic penalty is the end of the 12th week of classes of each fall and spring semester. See the academic calendar for specific dates, including summer sessions. Withdrawal from a course results in a grade of "W" (withdrawal) for the course. Failure to submit the withdrawal form results in a grade of "FX" (failure due to excessive absence). A grade of D will be entered for graduate courses.

Ordinarily, no student will be allowed to withdraw from any course after the deadline. However, in extreme circumstances, a student may request a late withdrawal with the associate dean of his/her school. Late withdrawals are intended to accommodate only circumstances that are deemed to be beyond the student's control. Students requesting a late withdrawal submit

a written statement with supporting documentation to their associate dean who will confer with the course instructor. The request with supporting documentation is reviewed by a panel composed of an associate dean from each of the three schools and a designate from the Griff Center for Academic Engagement. In the case of a split decision by the panel, the final decision will reside with the dean of the school of the student. Withdrawals will not be granted during final exam week.

Leaves and Withdrawal

WITHDRAWAL FROM THE COLLEGE

A student desiring to withdraw from the college must consult with a designated member of the Griff Center for Academic Engagement who will forward the withdrawal form to the appropriate associate dean. In the case of freshmen, a parent or guardian must indicate approval of withdrawal by signing the withdrawal form. The official date of the student's withdrawal is the date on which the withdrawal form is received and approved by the appropriate associate dean. A student withdrawing from the college at any time during a semester without proper authorization fails all of his/her courses for that semester.

A student who does not register for two or more semesters and returns to the college is required to follow the catalog requirements at the time they are readmitted to the college.

MEDICAL LEAVE OF ABSENCE

Students may request a leave of absence from Canisius College when a medical condition significantly interferes with their ability to function at the college. This policy is intended to assist students with an absence of one to two semesters. It is not intended to allow a long period of absence during a single semester. A student taking a leave of absence for medical reasons will not be eligible to complete courses within the semester for which the medical leave of absence is approved.

Students must submit a written request for a medical leave of absence with the Griff Center for Academic Engagement (OM 013). For a leave of absence to be considered, a student must provide written verification from a licensed health/mental health professional of the presence and/or severity of a medical condition. Questions or concerns should be directed to the Griff Center for Academic Engagement.

A student granted a leave of absence will be expected to return to Canisius College after the leave has ended. Failure to return from a leave of absence after two semesters results in a formal academic withdrawal from Canisius College. A registration hold will be placed on the student's account during a leave of absence.

To return from a leave of absence, the student must provide the Griff Center for Academic Engagement with an appropriate written statement from a licensed health/mental health professional that confirms the student sought and received treatment and is capable of meeting the challenges of academic life. When appropriate, this statement should also include recommendations for continued treatment once the student returns to the college and any needed academic restrictions or accommodations. It is expected that a request to return should be made at least 30 days in advance of the commencement of the new semester. The Griff Center for Academic Engagement will determine the conditions a student will need to meet in order to return after reviewing the statement with appropriate personnel.

VOLUNTARY LEAVE OF ABSENCE

A student who wishes to take a semester or two off, but plans to return to the college within one calendar year, may elect to take a leave of absence. A student who has been on leave for more than one year and/or attended another institution while on leave will be required to re-apply for admission to the college.

INVOLUNTARY LEAVE OF ABSENCE

When a student's behavior is disruptive to the college community or when a student's behavior presents a danger to themselves or others, the senior associate dean of students or their designee may place the student on an involuntary leave of absence in accordance with the College's Students of Concerns Policy. A student's return from an involuntary leave is dependent upon the resolution of the circumstances leading to that leave and must be coordinated with the senior associate dean of students or their designee.

Graduation

Degrees are awarded three times a year: September 15 for students completing their degree requirements during the summer; February 1 for students completing their requirements during the fall semester, and at the annual May commencement ceremony on the date designated in the college academic calendar. Students who anticipate completing degree requirements the following May, August or September should submit an "Application for Graduation through the commencement community page on *myCanisius* by the deadlines below:

If your requirements will be completed:	Application for Graduation due by:	Your diploma will be available:
In May	December 15	At May Commencement
In August	August 1	Approx. September 15
In December	December 2	Approx. February 1

To qualify for the degree of bachelor of arts or bachelor of science, a candidate must complete a minimum of 120 credit hours, the core curriculum requirements and all requirements of the major. To qualify for the degree of associate of arts, a candidate must complete satisfactorily 20 three- or four-credit hour courses and a minimum of 60 credit hours.

Satisfactory completion of requirements means that the candidate has maintained the grade point average indicated in the section on Academic Standing and has completed all general and departmental requirements as outlined in this catalog.

In extraordinary circumstances a student may petition the Student Records and Financial Services Center to be allowed to participate in graduation ceremonies even though the student will not have completed all degree requirements by the date of commencement. Before graduation, the degree candidate must settle all accounts with the Center.

A student who completes the degree requirements in August or December and wishes to obtain his/her diploma before the next commencement should call or visit the Student Records and Financial Services Center after September 15 or February 1. Each student's name should be submitted to the Center office exactly as the student wishes it to appear on all official documents of the college.

It is the student's responsibility to keep this file accurate. A fee of \$30.00 will be assessed to reprint a diploma if the name on the new diploma is to differ from that on the official record of the college.

GRADUATION HONORS

Only students who have completed the last 60 credit hours of academic work at Canisius College are eligible for graduating with honors. The Canisius College cumulative grade point average (truncated at two decimal points) determines graduation with honors according to the following scale:

- Degree is awarded summa cum laude to those whose average is 3.80 or higher.
- Degree is awarded magna cum laude to those whose average is 3.65 or higher.
- Degree is awarded cum laude to those whose average is 3.45 or higher.

Policy on Student Records

The Family Educational Rights and Privacy Act of 1974 (FERPA; Section 438 of the General Education Provisions Act) as amended is the federal law governing individuals' access to student records. The guiding principle of FERPA is that education records are private and that students have the right to limit their disclosure to third parties. FERPA grants students the right to inspect and review their education records, the right to request to amend their education records and the right to limit disclosure of some personally identifiable information known as directory information. In compliance with FERPA, the following constitutes the college's policy instructing students of the procedures available to provide appropriate access to personal records while protecting the confidentiality of these records.

For purposes of FERPA, "education records" are all records which contain information directly related to a student and maintained by Canisius College. Records that are not "education records" include but are not limited to sole possession, law enforcement, employment, medical and counseling, and post-attendance records. Please note that this policy does not apply to student records and files retained by individual faculty/staff members which are not accessible to any other person except a substitute designated by the faculty/staff member. A "student" is defined as one who has attended or is attending Canisius College and regarding whom Canisius College maintains education records.

All students have records in the student records office, but additionally, students may also have records in the following places:

- Dean and/or Associate Deans of the College of Arts and Sciences, the Wehle School of Business, and the School of Education and Human Services
- Center for Professional Development
- Office of Student Affairs
- Student Health Center
- Office of Residence Life
- Departmental offices

Normally, education records will not be released — nor access given — to third parties without written consent of the student unless the party meets one of the following:

- To school officials (faculty and staff) who have a legitimate educational interest in the records. The determination of those who have "a legitimate need to know" will be made by the person responsible for the maintenance of the record. This determination must be made scrupulously and with respect for the individual whose record is involved.
- To federal, state and local officials involving an audit or evaluation of compliance with educational programs.

- To anyone who is providing financial aid to the student ("financial aid" does not include any payments made by parents).
- To organizations conducting certain studies for or on behalf of the college.
- To accrediting organizations to carry out their functions.
- To comply with a judicial order or a lawfully issued subpoena.
- To parents of a dependent student.
- To appropriate parties in a health or safety emergency.
- To schools in which a student seeks or intends to enroll.
- To an alleged victim of a crime of violence of the results of a disciplinary hearing regarding the alleged perpetrator of that crime with respect to that crime.
- To parents/legal guardian when their children (under age 21) are found to have violated the Canisius College alcohol or drug policy.
- To military recruiters who request "Student Recruiting Information" for recruiting purpose only.
- To the Internal Revenue Service (IRS) for purposes of complying with the Taxpayer Relief Act of 1997.
- To the Bureau of Citizenship and Immigration Services (BCIS) for purposes of the Student and Exchange Visitor Program.
- To authorized representatives of the Department of Veterans Affairs for students receiving educational assistance from the agency.

It should be noted that FERPA permits the disclosure of education records to the parents of a dependent student. The college, however, considers its students to be adult decision-makers; as such, students have the right and responsibility to share information about their grades and degree pursuit with their parents and/or guardians. This means that the staff of the college normally will not give out information about grades or degree pursuit and will instead suggest that parents or guardians have conversations directly with students about these matters. The college's policy provides a greater degree of privacy for dependent students than FERPA would require. If the student agrees to have this information released to the parents, the student must sign an Authorization to Disclose Grades form with the Student Records and Financial Services Center, Bagen 106. A student may authorize the release of specified records to other specific individuals. A notification of releases made to third parties must be kept in the student's record. This notification is open only to the student and the person in charge of the record. The third party must be informed that no release of personally identifiable data is authorized without the written consent of the student.

A notification of releases made to third parties shall be kept in the student's record (unless forbidden by a judicial order or subpoena). The third party shall be informed that no release of personally identifiable data is authorized without the written consent of the student.

The college has established the following procedures enabling students to have access to their records:

1. The student may see his or her record by filling out a request form at the office where the record of interest is maintained. Students may not inspect and review the following:
 - Financial information submitted by parents.
 - Confidential letters and recommendations placed in their files prior to January 1, 1975.
 - Confidential letters and statements of recommendation placed in records after January 1, 1975, to which the student has waived his or her right to inspect and review.

- Education records containing information about more than one student; however, in such cases, students will be given access to the part of the record which pertains only to the inquiring student.
 - Employment records kept in the normal course of business which relate exclusively to students as employees.
 - Medical records kept in the Student Health Center. This office rigidly protects the confidentiality of those records but they can be reviewed by a physician or appropriate professional of the student-patient's choice.
2. Access is to be granted promptly and no later than 30 days from the date of the request.
 3. The student may obtain copies of documents to which he or she is entitled, by requesting the documents in writing. The college may charge for these copies.
 4. The student may request and receive interpretation of his or her record from the person (or designee) responsible for maintaining the record.

Students have the right to challenge the content of their education records if they consider the information contained therein to be inaccurate, misleading or inappropriate. The process includes an opportunity for amendment of the records or insertion of written explanations by the student into such records. The procedures for challenging records can be found in the Office of Student Affairs Old Main 102.

Unlike education records, directory information shall be released freely unless the student files the appropriate form requesting that certain information may not be released. This form is available at the Student Records and Financial Services Center, Bagen 106. Directory information includes but is not limited to name, address, e-mail address, phone number, photograph, date and place of birth, major field of study, dates of attendance, grade level, enrollment status, participation in officially recognized activities and sports, weight and height of members of athletic teams, degrees, honors and awards, received and most recent education agency or institution attended.

This policy does not preclude the destruction of any record the college does not consider germane. Persons in charge of records shall ensure that only pertinent items are retained in student files. The forms for "Request for Confidential Status of Directory Information" and "Authorization to Disclose Grades" shall be removed from a student's educational records upon graduation unless the student makes a specific request that these forms remain.

Advisement

Students come with diverse needs and varied backgrounds. The college believes that this diversity calls for individualized assistance as students develop into self-directed, independent learners. The Griff Center for Academic Engagement provides new students with comprehensive programs, services, and resources to support student academic and career success and a transformative learning experience grounded in our Catholic, Jesuit mission. The Griff Center is a hub for academic and career advising and has professional staff ready to assist students in their academic and professional development. The goal of the Center is to provide students with the academic support and assistance they need to become successful lifelong learners. The professional staff in the Griff Center for Academic Engagement helps students recognize their academic strengths and weaknesses, establish educational goals and career plans, and identify the appropriate majors, courses, and resources that are necessary to achieve their academic success.

FRESHMEN

Each entering freshman is assigned to a GRIF 101 interest-based experience where a faculty/staff member is the facilitator of the class and serves as the first-year academic advisor. This non-credit course runs each week for the first semester and allows students with the same interest to engage in a common theme. In addition, the facilitator/advisor will explain the core curriculum; introduce academic resources; address student performance; and discuss transitional topics throughout the weekly sessions.

First-Year Writing Placement

The First-Year Writing Program in conjunction with the Griff Center for Academic Engagement screens incoming freshmen for appropriate placement in writing courses (FYS 101 or ENG 100). High school average, SAT, ACT, and high school English and Social Studies Regents scores are used to determine placement.

Mathematics Placement

The Department of Mathematics and Statistics, in conjunction with the Griff Center for Academic Engagement, screens incoming freshmen for appropriate placement in mathematics. High school average, SAT, ACT, and high school mathematics scores are used to determine the placement.

UNDECIDED STUDENTS

Students who have not selected a major after their freshman year will receive academic advisement and career services from the Griff Center for Academic Engagement.

PART-TIME STUDENTS

Part-time students are required to meet with an advisor, and are encouraged to use the services of the Griff Center for Academic Engagement in selecting proper courses and understanding the resources that are available to assist them at the college.

UPPER CLASS STUDENTS

After the freshmen year, students who have selected a major are assigned a major advisor in their academic field of interest. The Griff Center will assist with the transition to the academic department and major advisor assignments. Upperclassmen must meet with their advisor within the academic department for major advisement each semester.

NON-MATRICULATED STUDENTS

Non-matriculated students are registered through the Student Records and Financial Services Center in BA 106. Those who are interested in matriculating at Canisius are welcome to meet with an advisor in the Griff Center for Academic Engagement.

Griff Center for Academic Engagement

The Griff Center for Academic Engagement (<https://www.canisius.edu/student-experience/student-support-services/griff-center>) provides comprehensive programs, services, and resources to support student academic and career success and a transformative learning experience grounded in our Catholic, Jesuit mission. The Griff Center assists students in their academic and professional development and provides them with the support and assistance they need to become successful lifelong learners.

The Griff Center includes the programs listed below and also hosts a variety of additional workshops to build academic skills in the classroom and beyond.

New Student Orientation

New Student Orientation is the beginning of the journey for new students that provide a welcoming, informative, and incredibly fun start to their academic careers at Canisius. The program highlights a variety of academic supports and campus resources through informational sessions and activities.

GRiFF 101 First-Year Experience Program

This program is designed to help guide new students through the transition to college, connect with students who share similar interests, explore the many academic opportunities available, and prepare students for four great years at Canisius! Throughout the fall semester, students will discover firsthand the Jesuit tradition of *cura personalis*, care for the whole person – mind, body, and spirit. With over 40 themes offered, the GRiFF 101 experience is sure to be filled with fun. This is an opportunity to connect on a regular basis with advisors who facilitate GRiFF 101, engage in interesting experiences, and meet new people.

The GRiFF 101 experience will include three mandatory workshops on the following important topics:

- Step Up Griffs! (Bystander Intervention)
- Explore, Experience, Engage – Using Your Strengths
- Griffs with Grit! Being Resilient in the Classroom and Beyond!

Strengths

The Griff Center uses StrengthsFinder to assist students in identifying and optimizing their strengths and applying them to all aspects of their lives. StrengthsFinder is used by hundreds of colleges and universities throughout the United States and it has been determined that students who are aware of their strengths are more likely to stay in college, earn higher GPA's, and find success securing internships and jobs.

A student's Strengths experience begins by taking the StrengthsFinder online assessment, which takes 20-30 minutes to complete. The top 5 talent themes are identified and this is the first step towards developing natural talents into strengths. The Griff Center helps guide students through the different themes, helps the student develop ways to incorporate their strengths into their daily life, and build upon them as they explore academic and career goals. Stop by the Griff Center to make an appointment to learn more about this great opportunity.

The Tutoring Center (OM 315)

Tutoring services are available for all Canisius students and provide a variety of opportunities for them to achieve their own academic success. Group tutoring sessions allow students to receive academic assistance from peer and adjunct professor tutors. Tutors are available in the majority of academic disciplines and employ various academic strategies to help address individual student needs.

The Study Center Program (OM 318)

Open to all Canisius students, the Study Center provides students with an opportunity to focus on academic work in a quiet environment conveniently located near the Tutoring Center where additional assistance may be sought.

Academic Mentor Program (OM 317)

This program presents students with an opportunity to meet one-on-one with an academic mentor on a regular basis to assist with better time

management, prioritization of responsibilities, study skills, and assistance needed to achieve academic success.

Accessibility Support (OM 317)

Committed to creating equal access for all Canisius students with disabilities, Accessibility Support helps meet individual needs and oversees the administration of reasonable accommodations and proctoring exams. Academic and non-academic accommodations are determined on a case-by-case/course-by-course basis after review of a student's official documentation.

Proctor Site (OM 317)

The Proctor Site assists in proctoring make-up exams for the campus community. Students must determine the feasibility of a make-up exam with their professor prior to making arrangements with the proctor site.

Veterans Support (OM 320)

The Griff Center provides an environment that helps student-veterans achieve their academic and personal goals. Our staff is committed to creating a supportive and friendly atmosphere where students feel comfortable seeking assistance concerning both academic and non-academic issues. In addition, there is a lounge designated for student-veterans where they may study and relax between classes.

Career Planning and Services: EXPLORE – EXPERIENCE – ENGAGE (OM 013)

Career development begins on day one at Canisius! The Griff Center has developed a three-point career action plan designed to help students and alumni:

- EXPLORE • Learn about their strengths and interests and how they relate to majors and careers
- EXPERIENCE • Gain experience through internships, service, and research
- ENGAGE • Network with alumni and employers to launch your career

The Griff Center is here to help students and alumni develop career plans and gain the professional skills needed in today's competitive job market.

The Griff Center provides personalized, cutting-edge services and programs to meet the complete career development needs of Canisius students and alumni. The Griff Center offers: Career coaching; Assistance with locating internship and job opportunities; Resume and cover letter review; Videotaped mock interviews; On-Campus Interviews with local and national organizations; On-and Off-Campus recruiting events and professional development opportunities.

Handshake

The Griff Center provides students and alumni with services, programs and opportunities that will allow them to explore how their academic and personal interests align with their natural talents and professional opportunities, starting their very first semester on campus. The Griff Center is excited to provide students and alumni with free access to Handshake, a new, exclusive platform for Canisius students and alumni to search for full-time, part-time, volunteer, and internship opportunities.

Honors and Awards

RECOGNITION OF ACADEMIC EXCELLENCE

Canisius College offers a number of opportunities to celebrate student academic success. These include:

Dean's List and Merit List (p. 72) recognition each semester based on a student's grades in that semester.

Honor society membership (p. 72) for students who meet the qualifications.

College-wide awards (p. 73) that are given to students regardless of their major (generally given at the Honors Convocation at the end of a student's senior year).

Departmental awards and honors (p. 73) (generally given at the Honors Convocation at the end of a student's senior year).

Graduation Honors (described at the end of the section on graduation (p. 68) in this catalog).

Dean's and Merit Lists

Two categories of recognition are awarded at the end of each semester. The first recognizes full-time students and the second recognizes both full-time and part-time students. In addition, students in either category who achieve a 4.00 will receive the designation "with Special Distinction."

Dean's List

Awarded to students who have attained a grade point average of at least 3.50 for the semester and have completed at least four courses of three credits or equivalent.

Merit List

Awarded to students who have attained a grade point average of at least 3.25 for the semester and have completed two courses of three credit hours or equivalent.

Students who receive an "Incomplete" grade will be eligible for the Dean's or Merit lists once the work is completed and a passing grade submitted. The "Incomplete" grade must be changed within six weeks from the end of final examinations deadline.

Honor Societies

Canisius College has chapters of a number of national and international honor societies. These societies have established specific academic requirements for students who wish to join the society, and most also have additional requirements that may include service, participation, recommendations, or academic standing guidelines.

Honor Societies Open to Students in Any Major

Alpha Sigma Nu is the honor society of Jesuit institutions of higher education, including all 28 Jesuit colleges and universities in the United States, Regis College of the University of Toronto, Campion College in Regina, Saskatchewan, and Sogang University in Seoul, South Korea. Juniors, seniors, and students in graduate and professional schools who rank in the top 15 percent of their classes may be considered for membership. The college's chapter may nominate no more than four percent of the junior and senior classes for membership. In addition to scholarship, loyalty to the

college and the Jesuit ideals of higher education, and service to the college and larger community are the criteria for admission.

Chi Alpha Sigma is the national college athlete honor society.

Di Gamma is the Canisius Honor Society that recognizes those who have rendered outstanding service to Canisius College.

Major-specific Honor Societies

Alpha Kappa Delta is an international sociology honor society. It promotes human welfare through the association of a fellowship group interested in developing scientific knowledge that may be applied to the solution of social problems.

Alpha Phi Sigma is the national criminal justice honor society

Beta Beta Beta is the national honor society for students majoring in the biological sciences. Students must demonstrate academic achievement as well as be involved in service, scholarship, and social activities to be inducted as a national member.

Beta Gamma Sigma is the premier honor society recognizing business excellence, and only recognizes students in AACSB accredited programs. The Wehle School of Business established its chapter of Beta Gamma Sigma (<https://www.betagammasigma.org>) in 1978. Lifetime members of the Society have earned the right to be considered the "Best in Business." Students who graduate in the top 20 percent of their class are eligible for membership.

Delta Phi Alpha is a society that recognizes students majoring in German and holding a GPA of 3.0 or higher within the major. The society strives to bring both a fun and serious atmosphere allowing members to learn more about German culture from academic and social standpoints.

Eta Sigma Phi is the honorary society for classical studies

Iota Tau Alpha is the athletic training education honor society

Kappa Delta Pi is the international honor society in education

Lambda Pi Eta recognizes, fosters and rewards outstanding scholastic achievement in communication studies. Lambda Pi Eta's ideal is to stimulate interest, promote and encourage professional development, and to provide an opportunity to discuss and exchange ideas in the field of communication. This society is the national communication association's honor society.

Phi Alpha Theta is the national history honor society. The local chapter's events include speakers, lectures, an annual induction ceremony and participation in a convention. Prospective members must have taken a minimum of four history courses with a 3.25 GPA and a minimum 3.06 QPA.

Phi Sigma Tau serves as a means of awarding distinction to students who have high scholarship and personal interest in philosophy, as well as popularizing interest in philosophy among the general collegiate population.

Pi Delta Phi is the national French honor society

Psi Chi is an international honor society in psychology and recognizes students at both the undergraduate and graduate level.

Sigma Delta Pi is the national collegiate Hispanic honor society. Membership is available to students who attain excellence in the study of the Spanish language and who have made contributions to the Latino/a culture.

Sigma Tau Delta is an international English honor society that honors undergraduates, graduate students, and scholars in academia, as well as upon

professional writers who have recognized accomplishments in linguistic or literary realms of the English language. Members have the opportunity to formulate ethical principles, develop skills in creative and critical writing, and foster a spirit of fellowship.

College-Wide Awards and Prizes

(Awards and prizes are based upon seven semesters of completed work)

Rev. Francis A. O'Malley, SJ, Memorial Award is awarded to the member(s) of the graduating class who has achieved the highest cumulative average among students who have completed four years of study at Canisius College. This award is based on eight semesters of completed work and is announced at graduation.

Rev. James M. Demske, SJ, Scholastic Achievement Award is bestowed upon a senior(s) who has transferred to Canisius College and has completed at least 60 credit hours at Canisius. This student will have achieved an exceptionally high cumulative average while a student at Canisius. This award is based on all semesters of completed work at Canisius and is announced at graduation.

The Alumni Association Distinguished Senior Award is awarded to a senior(s) who has distinguished him/herself through leadership roles and service to the college.

ALANA Achievement Award is bestowed on a senior who exemplifies the Jesuit value of *Magis* through academic excellence, character, leadership and dedication to the Canisius community and to others.

The Campus Ministry Award is given to a graduating senior who has contributed to the Canisius College community through participation in the events and programs of Campus Ministry and who has taken a leadership role in faith and justice activities.

The Dr. Martin Luther King, Jr. Awards are given to faculty members, students, or administrators whose lives and work best represent the ideals of Dr. King.

ALL-COLLEGE HONORS PROGRAM

Robert J. Butler Award for Leadership is awarded to the student(s) who has made particularly significant contributions to the All-College Honors Program.

Kristin M. Brady Award for Excellence in All-College Honors Thesis is awarded to the student who has written the best thesis that year.

Amy Betros Community Service Award. In the Jesuit spirit of "men & women for and with others," this award is named for Amy Betros, who co-founded and co-directs St. Luke's Mission of Mercy on the East Side of Buffalo, as it provides food, clothing, shelter, and tutoring for those in need.

John J. Hurley Award is awarded to the All-College Honors student graduating in the spring semester who best exemplifies the Jesuit values of academic excellence, leadership, and the promotion of justice. The award is named for the Canisius College president who was an outstanding All-College Honors student (Class of 1978) at Canisius and, since then, has exemplified the spirit of *magis* as a community leader, generous benefactor, and a tireless advocate of social justice.

RAICHLÉ PRE-LAW CENTER

The Albert R. Mugel Award is presented annually by the Raichle Pre-Law Center. It is given to a senior intending to pursue a career in law and

whose achievements, individual character and dedication to the welfare of the community best exemplify the career and ideals of Albert R. Mugel. Mr. Mugel was a member of the college's Board of Trustees and worked tirelessly to enhance the Pre-Law Center and enhance its position in Western New York.

URBAN LEADERSHIP LEARNING COMMUNITY

The Lenore "Lee" Rosica Award for Outstanding Leadership and Service is presented to the Urban Leadership Learning Community senior who has demonstrated outstanding leadership and service both at the college and in the wider community.

The Sebastian J. "Red" Rosica Award for Excellence in Academic Achievement is presented to the Urban Leadership Learning Community senior who has earned the highest GPA in their undergraduate career.

WOMEN & GENDER STUDIES PROGRAM

The I. Joan Lorch Award for Women's Studies is awarded to a student who has made a significant contribution to promote women's issues on the Canisius College campus through such activities as writing a newspaper series, performing committee work, or representing women's issues on a governing body.

Departmental Awards

COLLEGE OF ARTS & SCIENCES DEPARTMENTAL/PROGRAM AWARDS

ABEC Program

The ABEC Exemplar Award recognizes the graduating senior in the ABEC program who embodies the Canisius College ideal: excellence in the classroom, outstanding scholarship, and a dedication to making the world a better place by advancing the fields of animal welfare and wildlife conservation.

ABEC Highest GPA Award is awarded to the student who holds the highest GPA in the ABEC major.

ABEC Excellence in Research Award recognizes a student whose outstanding scientific research helps to advance the understanding of animals.

ABEC Service Award recognizes the outstanding community services of a graduating animal behavior major.

Bioinformatics Program

The Student General Excellence Award in Bioinformatics honors the bioinformatics major who, along with a high GPA, has also made contributions to the field through research and/or service activities.

The Bioinformatics Program Excellence in Research Award honors a bioinformatics student who has completed significant research at the undergraduate level.

Biology Department

The Alpha Theta Chapter of Tri Beta, National Biological Honor Society, Fialkiewicz Award for Academic Excellence in Biology is given to the graduating biology major with the highest academic average.

The Alpha Theta Chapter of Tri Beta, National Biological Honor Society, Alexander Award for Outstanding Research in Biology is given to the graduating biology major who has completed the most significant independent research project leading to presentation or publication in scientific literature.

The Nancy Wohlschlag Distinguished Research Award is given to the graduating biology major who has completed a significant research project leading to presentation or publication in the scientific literature.

The John Kalb Award for Exemplary Research in Biology is presented to the graduating senior who completed the most substantial, independent research project in biology and who embodies the enthusiasm for scientific research as that displayed by the late Professor John Kalb.

The Biology Department Excellence in Research Awards are given to graduating biology majors who have completed substantial research projects leading to presentation or publication in the scientific literature of their discipline.

Chemistry/Biochemistry Department

The Valerian A. Ruskiewicz Award for Distinction in Chemistry acknowledges superlative academic achievement demonstrated by the highest GPA in the department.

The Student General Excellence Awards of the WNY Section of the American Chemical Society, the department's highest awards, are presented to one chemistry and one biochemistry major who demonstrate outstanding academic achievement along with a strong commitment to service within our academic community.

The Student General Excellence Award of the American Institute of Chemists is given in recognition of a demonstrated record of ability, leadership and professional promise within the field of chemistry.

Distinction in Chemistry Award is awarded for outstanding performance (greater than 90%) on the DUCK Test (Diagnostic Undergraduate Chemistry Knowledge Test) as well as a GPA greater than 3.5.

Gerald Zon Chemistry/Biochemistry Undergraduate Research Award recognizes accomplishments in chemistry/biochemistry research.

Jeffrey M. Rose Award recognizes extraordinary service to the department and the student chapter of the American Chemical Society at Canisius, as well as excellence academic achievement.

Classics Department

The David B. Dietz Classics Book Award is given for outstanding performance in Classics courses.

Communication Studies Department

The Academic Excellence in Communication Studies Award is given to the graduating Communication Studies senior with the highest GPA in the major.

The Academic Excellence in Digital Media Arts Award is given to the graduating Digital Media Arts senior with the highest GPA in the major.

The Academic Excellence in Journalism is given to the graduating Journalism senior with the highest GPA in the major.

Digital Media Arts Outstanding Portfolio Award recognizes an exceptional Digital Media Arts capstone project and portfolio. It is given to a student whose portfolio exhibits distinction in creativity, design, technical proficiency and professionalism.

The Association of Women in Communication Scholarship Award is given to the graduating senior member of the association who served as an officer and has the highest GPA in the major.

The American Advertising Federation Academic Excellence Award is given to the graduating senior member of the federation with the highest GPA in the major.

The Public Relations Student Society of America Academic Excellence Award is given to the graduating senior member of the society with the highest GPA in the major.

The Gene and Peter Jankowski Award of Excellence is given to a graduating senior in Communication Studies or Digital Media Arts who has demonstrated excellence in academic performance and television production.

The WGRZ-TV Excellence in Multimedia Journalism Award is presented to a graduating senior Communication Studies major who has demonstrated outstanding skills and a commitment to journalism through the medium of television.

The Society of Professional Journalists Award is given annually to the graduating Journalism student whose work best exemplifies the ideals of the program.

Computer Science Department

The Computer Science Department Excellence in Academics Award is presented to graduating computer science majors who have achieved an outstanding academic performance.

The Computer Science Department Excellence in Research Award is presented to graduating computer science majors who have achieved outstanding results in computer science research.

English Department

The Charles A. Brady Award for Excellence in English is awarded to the graduating English major whose achievement in English courses and literary extra-curricular involvement has been superior throughout his or her college career.

The G. E. Murray Award for Excellence in Creative Writing is awarded by the faculty to the graduating creative writing minor whose achievement in writing courses and whose own creative writing have been superior throughout his or her college career.

The Leslie C. Warren Award for Academic Excellence is awarded to the graduating English major who has the highest academic average for his or her college career.

Environmental Science Program

The Environmental Science Award for Academic Excellence is awarded to the graduating Environmental Science major with the highest academic average for his or her college career.

The Environmental Science Award for Excellence in Research is awarded to the graduating Environmental Science major who has completed a substantial research project in environmental science leading to presentation and/or publication.

Environmental Studies Program

The Rachel Carson Award for Outstanding Achievement in Environmental Studies is awarded to the graduating student with the highest GPA in the major and shows commitment to promoting environmental awareness in their work and study.

European Studies Program

Jean Monnet Award for European Studies is named for one of the founders of European integration. It recognizes achievement in European Studies in the classroom and through study-abroad and co-curricular activity.

Fine Arts Department

The Edith DeLuca Memorial Award is given to a graduating senior who has contributed musically to the college and the community through excellence in musicianship, service and leadership. The student exemplifies the high standards and values of Edith DeLuca, the founder of the Buffalo Philharmonic Concert Series at Canisius College.

The Thalia Feldman Memorial Award in Art History is awarded to a graduating senior in Art History who has maintained outstanding academic achievement and has demonstrated leadership in furthering an understanding of the importance of the visual arts in our community.

The Outstanding Achievement in Visual Art Award is presented to a graduating senior whose visual creativity has contributed to Canisius College and the community through excellence in visual art, service and leadership, thereby exemplifying the high standards of Canisius College and the Fine Art Studio Program.

History Department

The Professor William M. Harrigan Award for Excellence in History was inaugurated in 1971 to commemorate the late Dr. William M. Harrigan, chair of the History Department from 1960 to 1968. To promote excellence in historical scholarship, the award is presented to the senior who best exemplifies the standards of scholarship, interest in history and Christian values which Dr. Harrigan upheld.

The Professor Edwin L. Neville Scholarship in History is given to a senior History major or Secondary Education/Social Studies major who will pursue an advanced degree in history or social studies, preferably in Asian history.

The Rev. Nicholas J. Sullivan, SJ Award is given for excellence in historical writing.

The Professor Walter J. Sharrow Award is presented to a graduating senior who shows great promise as a teacher of history at the K-12 level.

International Relations Program

The International Relations Academic Excellence Award is given to the senior with the highest GPA among International Relations majors.

The International Relations Award for Global Understanding and Involvement is presented annually to the senior International Relations major demonstrating academic excellence and furthering international understanding.

Latin American Studies Department

Simon Bolivar Award for Latin American Studies presented to a Latin American studies senior who achieved high academic standing and demonstrated leadership in furthering the understanding of Latin American and/or Latino communities in the United States.

Mathematics & Statistics Department

The Dr. Robert Tidd Award for Distinction in Mathematics is given to an outstanding senior upon recommendation by the Department of Mathematics and Statistics.

The Dr. William M. Huebsch Award in Mathematics is given to a senior who combines excellent performance in mathematics with great promise in a career in the application of mathematics to other fields. The award is named in honor of Dr. Huebsch '43, who was a former chair of the Mathematics department.

Military Science Program

The General George C. Marshall Award is given annually by the George C. Marshall Foundation to the outstanding senior ROTC cadet in Buffalo.

The Outstanding Military Graduate Award is given to a distinguished Canisius College cadet who demonstrates exceptional leadership potential, academic achievement and participation in ROTC activities.

Modern Languages Department

The Northeast Conference on the Teaching of Foreign Languages (NECTFL) Board of Directors Award for Excellence in Language Study is presented to a graduating senior enrolled in the most advanced course of the language who shows evidence of interest in the language and international studies beyond work in the classroom.

The Raymond L. Girard Award for Distinction in French is bestowed annually on the graduating senior who best exemplifies the qualities of academic excellence and service in the field of French language, literature and culture.

The American Association of Teachers of French (AATF) Outstanding Senior in French Award is awarded to a student who has demonstrated exceptional commitment to the study of French through academic and extracurricular activities related to the language.

The German Consulate of New York Award for Excellence in German is bestowed on the graduating senior who exemplarily combines academic excellence in German language, literature and culture with service to his or her fellow students in the major over the course of four years.

The James J. McGoldrick Award for Excellence in German is bestowed annually on the graduating senior who best exemplifies the qualities of academic excellence and service in the field of German language, literature and culture.

The Nebrija-Bello Award for Distinction in Spanish is bestowed annually on the graduating senior who best exemplifies the qualities of academic excellence and service in the field of Spanish language, literature and culture.

Philosophy Department

Rev. J. Clayton Murray, SJ, Award in Philosophy is awarded to the outstanding student in philosophy.

The St. Thomas Aquinas Award in Philosophy is given, at the discretion of the Department of Philosophy, to a student who has demonstrated

exceptional achievement in satisfying the college's curriculum requirements in philosophy.

Physics Department

The **Valerian A. Ruskiewicz Memorial Prize for Distinction in Physics** is awarded annually to the member of the senior class who has the highest class standing throughout his/her course in physics.

The **Valerian A. Ruskiewicz Memorial Prize for Distinction in 3+2 Engineering** is awarded to the student with outstanding achievement in the 3+2 Physics/Engineering Program, who has mastered the fundamentals of both physics and engineering.

Political Science Department

The **Pi Sigma Alpha Award** is given to the student who best exemplifies academic excellence and the pursuit of knowledge in political science.

The **Woodrow Wilson Award** is awarded to the Political Science major who combines academic excellence with a demonstrated commitment to public service.

Psychology Department

The **Donald L. Tollefson Annual Psychology Award** is bestowed annually to the senior who best personifies Donald L. Tollefson's ideals of intellectual inquiry and professional engagement in the field of psychology.

The **Outstanding Psychology Student Award** is presented annually to graduating seniors with outstanding academic and pre-professional accomplishments in the field of psychology.

Religious Studies Department

The **Cyril O. Schommer SJ, Memorial Prize in Religious Studies** is awarded to the senior whose written work demonstrates theological insights and mastery of one of the religious studies disciplines.

The **Dr. James P. McDermott Award in Religion & Life** is given to the senior who manifests Dr. Jim McDermott's love of learning and his application of religious values in his daily life.

Sociology/Anthropology/Criminal Justice Department

The **Jesse Nash, Jr. Sociology Award** is given to the senior sociology major for academic excellence in sociology and a commitment to social justice in the legacy of Jesse Nash, Jr.

The **Canisius College Anthropology Award** is given to a graduating senior with the highest overall cumulative GPA in the major.

The **William H. Jarrett Criminal Justice Award** is given to a senior criminal justice major for academic excellence in criminal justice and a commitment to ethics in the legacy of William H. Jarrett.

SCHOOL OF EDUCATION AND HUMAN SERVICES DEPARTMENTAL/PROGRAM AWARDS

The **William F. Kean Award of Excellence in Education** is given to the graduating major in the School of Education & Human Services with the highest academic average.

Adolescence Education

The **Rev. Paul Nochelski, SJ, Award in Adolescence Education** recognizes a graduating student who has demonstrated the hallmark of Fr. Paul Nochelski's life: a consistent dedication to academic excellence and to the Jesuit values of *cura personalis* and social justice.

The **Thomas W. Fitzsimons Award in Adolescence Education** is bestowed upon a student who demonstrates excellence in academic performance, service to the college and the promise of a successful career in adolescence teaching.

The **Urban Education Award in Adolescence Education** is presented to the adolescence education major who shows outstanding dedication to the Canisius College ideals of commitment to urban education and the betterment of our local community.

Counseling & Human Services Graduate Department

The **Thomas & Camille Caulfield Award** is given to the graduate student counselor of the year.

Education Department

The **Bruce D. Perry, MD, PhD. Award in Early Childhood Education** is given to the outstanding early childhood major who exemplifies knowledge, skills and dispositions as dictated by the practices proposed by the National Association of the Education of Young Children.

The **Donald J. Murphy Award in Childhood Education** is bestowed upon a student who demonstrates excellence in academic performance, service to the college and the promise of a successful career in childhood teaching.

The **Dr. Kimberly A. Leavitt-Noble Award in Special Education** is given to the graduating senior who has maintained a high level of scholarship and demonstrates a commitment to teaching children with special needs.

The **William D. Bennett Award** is given to the graduating senior who demonstrates the hallmark of the late William Bennett's life: commitment to academic excellence and teaching in multi-cultural settings.

Kinesiology Department

The **John T. Gabbey, MD. Award for Excellence in Athletic Training** is presented to the graduating senior who has demonstrated outstanding skills in all aspects of the Athletic Training program

The **Rev. Edward F. Maloney, SJ, Physical Education Award** is given to the graduating senior each year who best displays academic achievement, contributions to college life, participation in the department, including sponsored activities and demonstration of professional qualities.

The **Health and Human Performance Award** is awarded to the student who best shows excellence in the field of human performance and exercise science, community involvement and excellent internship performance.

The **Future Professionals in Health & Wellness Award** is presented to an outstanding senior in health and wellness who is committed to service in the health and wellness professions.

Sport Management Department

The **Dr. Paul E. Bieron Sport Administration Award** is given to an undergraduate student enrolled in sports management as a concentration. The student will have had overall high academic achievement, participated

as a student intern in the sports industry and done significant scholarly work throughout the curriculum.

WEHLE SCHOOL OF BUSINESS DEPARTMENTAL/PROGRAM AWARDS

The **Alpha Kappa Psi Scholarship Key** is awarded annually to the graduate in the Richard J. Wehle School of Business who has attained the highest scholastic average over a three-year period. The award is made by the Delta Tau Chapter of Alpha Kappa Psi, the oldest national professional fraternity in commerce.

Outstanding Business Scholar Award is given each year to a graduating senior(s) who has demonstrated outstanding academic achievement in the Richard J. Wehle School of Business.

Accounting Department

The **Bradley J. Shelp, Jr. Memorial Award** represents the most prestigious honor the Department of Accounting can bestow upon an accounting student. This award is given on those occasions when the Department of Accounting identifies a senior accounting student who excels in demonstrated attributes of excellence in scholarship and service to the college.

The **New York State Society of Certified Public Accountants Awards** are given annually, one to a graduating senior in accounting and one to a graduating student in the MBA program in professional accounting. In each case the award is given to the student who has attained the highest scholastic average in accounting subjects and who is considered to be a desirable candidate for admission to the profession of public accounting.

The **Accounting Society Award for Excellence in Scholarship in the Accounting Program** is awarded annually to the outstanding senior accounting major.

The **Accounting Society Award for Excellence in Scholarship in the Accounting Information Systems Program** recognizes outstanding achievement by a senior AIS major and is given to the senior with the highest GPA in the AIS major courses.

Talal Abu-Ghazaleh International Award for Excellence in Graduate Accounting is awarded to an MBA graduate who is selected by the Committee of the Council on Accountancy at an overall outstanding student with the potential to make contributions to the accounting profession.

Economics/Finance Department

Nelson D. Civello Most Outstanding Graduate Award is given upon the recommendation of the faculty to the outstanding senior in the department.

Economics/Finance Department Best Finance Student Award is given to a graduating senior for academic excellence in finance.

John S. Murphy Award for Academic Excellence in Economics is given to a graduating senior for academic excellence in economics.

Entrepreneurship Program

Entrepreneurship Outstanding Student Award is given in recognition of academic excellence and commitment to entrepreneurial leadership as an entrepreneurship major.

International Business Program

The **International Business Outstanding Student Award** recognizes a student who has demonstrated academic excellence in his/her major as well as achievement in extracurricular activities including study abroad, international internships and participation in international conferences.

Management Department

Thomas J. Schillo Scholarship is awarded to a senior for high standards of academic excellence and personal integrity.

The **Management Academic Excellence Award** is presented annually to the top ten percent of senior management majors based on overall GPA.

Marketing Department

Donald E. Calvert Scholarship is awarded to a senior marketing or management student who displays superior academic and professional skills.

The **Marketing Academic Excellence Award** is presented annually to the top ten percent of senior marketing majors based on overall GPA.

COLLEGE OF ARTS AND SCIENCES

Elizabeth (Beth) A. Gill, Dean;
Debra Instone, Associate Dean and Director of Assessment;
Barbara J. Porter, Associate Dean / Study Abroad, International Students
and English as a Second Language

MISSION STATEMENT

The College of Arts & Sciences at Canisius provides an excellent liberal arts and sciences education by truly engaging students in the classroom, laboratory, studio, and broader community. As an integral part of a Catholic, Jesuit university the College of Arts & Sciences seeks to educate the whole person in preparation for service and leadership in a global society.

ACADEMIC PROGRAMS

The College of Arts and Sciences offers curricula leading to both undergraduate and graduate degrees. The undergraduate curricula provide programs in a wide range of disciplines in the humanities, fine arts, natural sciences, mathematics and social sciences. We offer 38 undergraduate majors in 18 academic departments. Each program combines the liberal-arts objectives of the Core Curriculum with the specific goals of a student's major field.

The College of Arts and Sciences also offers graduate programs leading to master of science degrees in either Communication and Leadership (<http://catalog.canisius.edu/graduate/college-arts-sciences/communication-leadership>) or Anthrozoology (<http://catalog.canisius.edu/graduate/college-arts-sciences/anthrozoology>).

UNDERGRADUATE MAJORS

Majors	Department
Animal Behavior, Ecology, and Conservation (ABEC)	Animal Behavior, Ecology, and Conservation (ABEC)
Anthropology	Sociology, Anthropology, and Criminal Justice
Art History	Fine Arts
Biochemistry	Chemistry and Biochemistry
Bioinformatics	Computer Science
Biology	Biology
Chemistry	Chemistry and Biochemistry
Classics	Classics
Communication Studies	Communication Studies
Computer Science	Computer Science
Creative Writing	English
Criminal Justice	Sociology, Anthropology, and Criminal Justice
Digital Media Arts	Communication Studies
Economics	Economics (Wehle School of Business)
English	English
Environmental Science	Biology
Environmental Studies	Sociology, Anthropology, and Criminal Justice
European Studies	Political Science

French	Modern Languages, Literatures, and Cultures
German	Modern Languages, Literatures, and Cultures
History	History
International Relations	Political Science
Journalism	Communication Studies
Latin American Studies	Political Science
Mathematics and Statistics	Mathematics and Statistics
Medical Laboratory Science	Biology
Music	Fine Arts
Philosophy	Philosophy
Physics	Physics
Political Science	Political Science
Psychology	Psychology
Religious Studies and Theology	Religious Studies and Theology
Sociology	Sociology, Anthropology, and Criminal Justice
Spanish	Modern Languages, Literatures, and Cultures
Urban Studies	Political Science

Additionally, there are three interdisciplinary majors offered that require preapproval before declaration through the deans office:

- Humanities
- Social Science
- Specialized Studies

UNDERGRADUATE MINORS

The many minors offered in the College of Arts and Sciences are identified in the descriptions of departmental offerings and available in the list of Undergraduate Minors A-Z (<http://catalog.canisius.edu/undergraduate/minors>).

INSTITUTES AND CENTERS

Also housed in the College of Arts and Sciences are:

- The William H. Fitzpatrick Institute of Public Affairs and Leadership
- The Frank G. Raichle Pre-Law Center
- The George E. Schreiner Pre-Medical Center
- The Institute for the Global Study of Religion
- Institute for the Study of Human-Animal Relations

Animal Behavior, Ecology, and Conservation

Chair: Sue Margulis, PhD

INTRODUCTION

The Animal Behavior, Ecology, and Conservation Program combines the rigorous scientific study of Animal Behavior with a values-focused curriculum in the liberal arts tradition. It is for students who want to thoroughly understand the facts and theoretical underpinnings of animal behavior and who want to use that understanding to promote animal welfare and wildlife conservation. For a more detailed description of the program,

faculty, facilities, academic and co-curricular opportunities please go to the ABEC website (<https://www.canisius.edu/academics/programs/animal-behavior-ecology-and-conservation>).

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Animal Behavior, Ecology, and Conservation.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

ABEC majors often choose to pursue one or more of the minors offered within the department (p. 80). Additionally, ABEC majors interested in informal education should consider the education minor (p. 273) offered in the School of Education and Human Services.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

The ABEC major requires 7 courses, plus a total of 24 additional credits from elective courses:

ABEC 101	Introductory Animal Behavior I	3
ABEC 102	Introductory Animal Behavior II	3
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
Select one of the following:		3-4
BIO 322	Conservation Biology	
ABEC 333	Conservation Behavior	
ABEC 337	Conservation Psychology & Environmental Education	
Select one of the following math courses:		3-4
MAT 131	Statistics for Social Sciences	
MAT 141	Inferential Statistics and Computers for Science	
PSY 201	Basic Statistics for Behavioral Sciences	
PHI 245	Animal Ethics	3
Total Credits		23-25

MAJOR ELECTIVES

Twenty four credits must derive from the following electives:

ABEC 220 & 220L	Animal Learning and Animal Learning Lab	4
ABEC 250	Zoo Animal Husbandry	1
ABEC 251	Zoo Animal Management	3
ABEC 301	Research Participation (credit)	1
ABEC 305	Assessing Animals	1
ABEC 332	Animal Welfare	3
ABEC 333	Conservation Behavior	3
ABEC 334	Conservation Psychology	3
ABEC 335 & 335L	Conservation Education and Conservation Education Lab	4
ABEC 337 & 337L	Conservation Psychology & Environmental Education and Conservation Psychology & Environmental Education Lab	4
ABEC 338 & 338L	Recreational Ecology and Recreational Ecology Lab	4
ABEC 339	Animal Enrichment	3
ABEC 340 & 340L	Research Methods in Animal Behavior and Research Methods in Animal Behavior Lab	4
ABEC 341 & 341L	Urban Ecology and Urban Ecology Lab	4
ABEC 342	Animal Geographies	3
ABEC 351	Zoo Exhibitory	1
ABEC 360	Observational Research Methods	4
ABEC 363	Canine Evolution, Behavior and Cognition	3
ABEC 370	Animal Cognition	3
ABEC 404	Wildlife Ecology and Conservation in South Africa	3
ABEC 490	Canisius Ambassadors for Conservation (credit may vary)	4

ABEC 491	Internship 1	3
ABEC 492	Internship 2	3
ABEC 495	Independent Research	3
BIO 301	Research Methods (credit)	1
BIO 312	Primateology	3
BIO 316	Social Organization of Mammals	3
BIO 317	Sex, Evolution and Behavior	3
BIO 320	Field Ecology	4
BIO 322	Conservation Biology	3
BIO 325	Reproductive Biopsychology	3
BIO 343	Entomology	4
BIO 355	Behavioral Neuroscience	3
BIO 365	Vertebrate Zoology and Ecology	4
BIO 366	Ornithology	4
or BIO 166	Biology of Birds	
BIO 375	Community Ecology	3
BIO 377	Freshwater Biology	4
BIO 378	Wetlands	3

MAJOR EXPERIENCES

Many elective courses involve travel, field work, and/or service. The department also offers numerous internship opportunities. Students are encouraged to participate in these experiences.

Recommended Semester Schedule for Major Course Requirements:

Freshman

Fall	Spring
ABEC 101	ABEC 102
BIO 111 & 111L	BIO 112 & 112L

Sophomore

Fall	Spring
BIO 316 (ABEC elective)	BIO 317 (ABEC elective)
Math course (choose one of the following)	PHI 245

MAT 141

MAT 131

PSY 201

Junior

Fall	Spring
ABEC elective	ABEC elective
ABEC elective	ABEC elective
	Conservation course

Senior

Fall	Spring
ABEC elective	ABEC elective

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Students will demonstrate factual knowledge and theoretical understanding in the field of animal behavior.
Students will:

Objective A: Demonstrate mastery of topics: animal phylogeny-taxonomy, evolution of behavior, and anthropogenic impacts on non-human animals and the environment

Objective B: Articulate the controversial nature-nurture (instinct vs. learning) dichotomy

Objective C: Identify ways to recognize cognitive processes in non-human animals

Objective D: Separate observations from inferences

Student Learning Goal 2

Students will demonstrate practical knowledge and appropriate application of animal behavior and conservation in two of the following settings: domestic animals, captive wildlife, free-ranging wildlife
Students will:

Objective A: Generate realistic and effective solutions to simulated behavior problems in captive or domestic animals;

Objective B: Generate realistic and effective solutions to simulated conservation problems

Objective C: Critically evaluate ethical implications of use or management of non-human animals

Student Learning Goal 3

Students will demonstrate scientific literacy and communication about science in written or oral form
Students will:

Objective A: Critically evaluate primary literature

Objective B: Interpret data

Objective C: Clearly articulate scientific ideas, concepts, and controversies

The ABEC program offers four minors for students who wish to concentrate in specific areas:

- Animal Behavior Minor (p. 83)
- Anthrozoology Minor (p. 83)
- Conservation Minor (p. 83)
- Zoo Biology Minor (p. 84)

For the ABEC minors, courses may be taken independently of the others and in any order. Interested students usually begin with the course that best fits their schedule. Most of the courses are offered every other year, so interested students should plan accordingly.

Additionally, the ABEC department contributes to the Education Minor (p. 273). ABEC majors with an interest in informal education may be interested in this minor. This minor does not lead to teacher certification.

ABEC 101 Introductory Animal Behavior I 3 Credits

First semester of a two-semester sequence that covers behavior across a wide range of species. Similarities and contrasts allow deductions regarding mechanisms and evolution.

Offered: every fall.

ABEC 102 Introductory Animal Behavior II 3 Credits

Second semester of a two-semester sequence that covers behavior across a wide range of species. Similarities and contrasts allow deductions regarding mechanisms and evolution.

Offered: every spring.

ABEC 220 Animal Learning 3 Credits

Animal learning and memory research with emphasis on practical animal training. Lab required.

Prerequisites: ABEC 101 & ABEC 102. **Corequisite:** ABEC 220L.

Offered: every spring.

ABEC 220L Animal Learning Lab 1 Credit

Required animal learning lab that emphasizes practical animal training.

Prerequisites: ABEC 101 & ABEC 102. **Corequisite:** ABEC 220.

Offered: every spring.

ABEC 250 Zoo Animal Husbandry 1 Credit

Topics in animal husbandry in the zoo setting. Focus is on the specific needs of different taxonomic groups, environmental management, veterinary monitoring, nutrition, and programming.

Prerequisites: ABEC 101 & ABEC 102.

Offered: Spring of odd-numbered years.

ABEC 251 Zoo Animal Management 3 Credits

Modern practices in zoo mission implementation. Focus on managing many facets of zoos: individual animals, populations of animals, visitors, research, education, staff, and budgets. The course is highly project-based and involves considerable group work and participation.

Prerequisites: ABEC 101 & ABEC 102.

Offered: every spring.

ABEC 300 Research Participation (no credit) 0 Credits

Recognition for ABEC research assistants, does not carry and credits.

Restriction: permission of instructor.

Offered: every semester."

ABEC 301 Research Participation (credit) 1 Credit

Recognition for ABEC research assistants. Can be taken up to 3 times for major elective credit; more than three times credit is free-elective.

Restriction: permission of instructor.

Offered: every semester.

ABEC 305 Assessing Animals 1 Credit

Assessing Animals will focus on applied behavioral analysis of non-human animals through various methodologies including functional assessments. Students will learn how to use such assessments to achieve behavioral goals through problem solving strategies for non-human animals. Occasional (1-2) weekend days may be required.

Offered: every fall.

ABEC 330 Animals, Public Policy, and the Law 3 Credits

This course provides an overview of both law and public policy as they impact modern societies views and treatment of non-human animals. Students will explore American and other national legal systems, as well as several different senses of the term 'public policy' in connection with companion animals, wildlife, research animals, and food animals.

Prerequisites: ABEC 101 & ABEC 102.

Fulfills College Core: Justice

Offered: every fall.

ABEC 332 Animal Welfare 3 Credits

The scientific study of assessing the welfare of captive animals. Use of quantitative research to improve welfare.

Prerequisites: ABEC 101 & ABEC 102. **Restriction:** juniors and seniors only.

Fulfills College Core: Advanced Writing-Intensive

Offered: every spring.

ABEC 333 Conservation Behavior 3 Credits

How human activity has altered the planet and how those modifications affect the behavior of animals. Review of key principles through the lens of Behavioral Ecology in regards to species requirements for survival, major threats to species existence, and conservation solutions to reduce those threats. Identification of positive human behavior for conservation outcomes.

Prerequisites: ABEC 101 & ABEC 102.

Offered: every fall.

ABEC 334 Conservation Psychology 3 Credits

Conservation psychology is an interdisciplinary field of study that focuses upon people's relationships with animals and the natural world. Conservation psychology is ultimately concerned with improving the quality of those relationships for the benefit of human and non-human beings as well as natural systems. In this course, students will explore the theoretical foundations of conservation psychology, including ecological approaches to human development, cognition, morality, sociality, emotion and behavior. Students will also learn about and practice various methods for studying human-animal-nature relationships. By the end of this course, students will be able to apply these theories and practices towards the constructive criticism of various conservation projects, policies, and interventions.

Prerequisites: ABEC 101 & ABEC 102. **Restriction:** juniors and seniors only.

Offered: most fall semesters.

ABEC 335 Conservation Education 3 Credits

Applying the theories and principles of conservation psychology to education in informal settings (zoos, aquariums, wildlife refuge). Assessing attitude and behavioral outcomes of conservatin education programs.

Prerequisites: ABEC 101 & ABEC 102. **Corequisite:** ABEC 335L. **Restriction:** juniors and seniors only.

Offered: most fall semesters.

ABEC 335L Conservation Education Lab 1 Credit

Required weekly lab for Conservation Education (ABEC 335).

Prerequisites: ABEC 101 & ABEC 102. **Corequisite:** ABEC 335. **Restriction:** juniors and seniors only.

Offered: most fall semesters.

ABEC 336 Child Animal Studies 3 Credits

This course considers how animals play distinct roles in child development, children's cultures, and even in the social construction of 'childhood.' It draws upon psychology, ethology, ethics, cultural studies, education, and anthropology.

Prerequisites: ABEC 101 & ABEC 102. **Restriction:** juniors and seniors only.

Offered: spring of odd-numbered years.

- ABEC 337 Conservation Psychology & Environmental Education** 3 Credits
The theoretical foundations of conservation psychology, including ecological approaches to human development, cognition, morality, sociality, emotion, and behavior. Assessing attitude and behavioral outcomes of conservation education programs.
Prerequisites: ABEC 101 & ABEC 102. **Corequisite:** ABEC 337L. **Restriction:** juniors and seniors only.
Offered: occasionally in fall.
- ABEC 337L Conservation Psychology & Environmental Education Lab** 1 Credit
Required weekly lab for Conservation Psychology & Environmental Education.
Prerequisites: ABEC 101 & ABEC 102. **Corequisite:** ABEC 337. **Restriction:** juniors and seniors only.
Offered: occasionally in fall.
- ABEC 338 Recreational Ecology** 3 Credits
Environmental consequences of outdoor recreation and nature-based tourism activities and their management. History and current state of outdoor recreation, including the policies that have shaped management of natural areas. Positive effects recreation through increased conservation support and stewardship and how both can be managed for coexistence.
Prerequisites: ABEC 101 & ABEC 102.
Offered: fall of odd-numbered years.
- ABEC 338L Recreational Ecology Lab** 1 Credit
Weekly lab for Recreational Ecology (ABEC 338).
Prerequisites: ABEC 101 & ABEC 102. **Corequisite:** ABEC 338.
Offered: fall of odd-numbered years.
- ABEC 339 Animal Enrichment** 3 Credits
This course emphasizes the roll of enrichment in various contexts (laboratory, shelter, and zoo). Multiple opportunities to design and implement enrichment are provided. The course uses the S-P-I-D-E-R framework for enrichment design and effectiveness.
Prerequisites: ABEC 101 & ABEC 102.
Offered: spring of even-numbered years.
- ABEC 340 Research Methods in Animal Behavior** 3 Credits
Observational and experimental research methods commonly used in studies of wild, captive, and domesticated animals. Evaluate peer-reviewed journal articles, research questions and hypotheses, collect behavioral data in observational and experimental contexts, and analyze and interpret data.
Prerequisites: ABEC 101, ABEC 102, & one of the following: MAT 131, MAT 141, or PSY 202. **Corequisite:** ABEC 340L. **Restriction:** juniors and seniors only.
Fulfills College Core: Advanced Writing-Intensive
Offered: every fall.
- ABEC 340L Research Methods in Animal Behavior Lab** 1 Credit
Required weekly lab for Research Methods in Animal Behavior (ABEC 340).
Prerequisites: ABEC 101, ABEC 102, & one of the following: MAT 131, MAT 141, or PSY 201. **Corequisite:** ABEC 340. **Restriction:** juniors and seniors only.
Offered: every fall.
- ABEC 341 Urban Ecology** 3 Credits
Critical examination of the natural ecosystems in which cities are embedded, from soil and vegetation to biodiversity and landscape scale processes. Investigations into how cities are both centers of human production and consumption that shape global ecologies as well as areas of critical habitat for nonhuman animals, with an aim to understand and promote coexistence.
Prerequisites: ABEC 101 & ABEC 102.
Offered: fall of even-numbered years.
- ABEC 341L Urban Ecology Lab** 1 Credit
Using Buffalo as a natural laboratory, visit urban sites of varying characteristics to analyze the effects of different types of urban development and management on ecosystems. Speak to local managers, collect and analyze ecological data, observe urban impacts to wildlife and ecosystems, as well as the connection between social and ecological systems in Buffalo.
Prerequisites: ABEC 101 & ABEC 102. **Corequisite:** ABEC 341.
Offered: fall of even-numbered years.
- ABEC 342 Animal Geographies** 3 Credits
Study of the entanglings of human-animal relations with space, place, location, environment and landscape.
Prerequisites: ABEC 101 & ABEC 102. **Restriction:** juniors and seniors only.
Offered: spring of even-numbered years.
- ABEC 351 Zoo Exhibitory** 1 Credit
Critical evaluation of zoo design principles. Involves travel to obtain first-hand study of distant zoological institutions.
Prerequisites: ABEC 101 & ABEC 102.
Offered: annually.
- ABEC 360 Observational Research Methods** 4 Credits
Study of the principal procedures used in animal behavior research. Involves the conduct of independent research project, from formulation of hypothesis through to presentation of results. Statistical analysis of data is a key component of the class, and students are expected to have completed their statistics requirement.
Prerequisites: ABEC 101, ABEC 102, & one of the following: MAT 131, MAT 141, or PSY 203. **Restriction:** juniors and seniors only.
Fulfills College Core: Advanced Writing-Intensive
Offered: spring of odd-numbered years.
- ABEC 363 Canine Evolution, Behavior and Cognition** 3 Credits
Introduction to the latest theories regarding how dogs evolved and were domesticated; how dogs communicate with humans and with each other, exposure to ground-breaking research into dog behavior, learning, cooperation, and cognition.
Prerequisites: ABEC 101 & ABEC 102. **Restriction:** juniors and seniors only.
Offered: every spring.
- ABEC 370 Animal Cognition** 3 Credits
The mental lives of nonhuman animals. Topics include basic processes (perception, attention), physical cognition (tool use, time and numbers) and social cognition (social learning, cooperation). Emphasis is on considering the perspective of the nonhuman animal.
Prerequisites: ABEC 101 & ABEC 102. **Restriction:** juniors and seniors only.
Offered: every spring.
- ABEC 403 Tropical Ecology** 1 Credit
Students will travel to Ecuador over Spring Break to learn tropical ecology first hand. The course will take students to both cloud forest and lowland rainforest ecosystems. Students will complete readings and mini-projects while in the field.
Prerequisites: ABEC 101 or ABEC 102.
Offered: most springs.
- ABEC 404 Wildlife Ecology and Conservation in South Africa** 3 Credits
Field experience in South Africa, emphasizing field methods for animal observation, and applicability to conservation. This course involves early application (previous fall), travel during summer, and additional fee.
Prerequisites: ABEC 101 & ABEC 102. **Restriction:** seniors only and permission of instructor.
Fulfills College Core: Core Capstone
Offered: every fall.

ABEC 419 Anthrozoology 3 Credits

An engagement with the fundamental issues of the field of Anthrozoology by evaluating the history of human/ nonhuman interactions, the categories into which human have sorted animals, and a variety of science-based and value-based approaches to humans' inevitable intersection with other living beings.

Prerequisites: ABEC 101 & ABEC 102. **Restriction:** seniors only.

Fulfills College Core: Core Capstone

Offered: every spring.

ABEC 490 Canisius Ambassadors for Conservation 4 Credits

Field study of endangered species and ecology, followed by educational outreach to school and public audiences.

Prerequisites: ABEC 101 & ABEC 102.

Offered: every semester.

ABEC 491 Internship 1 3 Credits

Internship in animal-related setting. Joint supervision by faculty and agency personnel. Application of classroom lessons to real-world situations. Students should register for the section most closely related to the internship activities. Section A is Anthrozoology, Section B is Animal Behavior, Section C is Conservation, and Section Z is Zoo Biology.

Prerequisites: junior or senior standing, minimum GPA of 2.0 in the major, a positive recommendation from a faculty member, & a completed & approved internship application..

ABEC 492 Internship 2 3 Credits

Internship in animal-related setting. Joint supervision by faculty and agency personnel. Application of classroom lessons to real-world situations. Students should register for the section most closely related to the internship activities. Section A is Anthrozoology, Section B is Animal Behavior, Section C is Conservation, and Section Z is Zoo Biology.

Prerequisites: junior or senior standing, minimum GPA of 2.0 in the major, a positive recommendation from a faculty member, & a completed & approved internship application.

ABEC 495 Independent Research 3 Credits

Independent project conducted under the supervision of a faculty member.

Prerequisites: ABEC 101 & ABEC 102. **Restriction:** permission of instructor.

Animal Behavior Minor

The Animal Behavior minor is designed for students who want to concentrate on animal behavior as a topic of study. This minor is open to any student from any major, except ABEC.

Required Courses

ABEC 101	Introductory Animal Behavior I	3
ABEC 102	Introductory Animal Behavior II	3

Additional Courses

Select 12 credits from the following: 12

ABEC 220	Animal Learning	
ABEC 305	Assessing Animals	
ABEC 332	Animal Welfare	
ABEC 333	Conservation Behavior	
ABEC 339	Animal Enrichment	
ABEC 340	Research Methods in Animal Behavior	
ABEC 360	Observational Research Methods	
ABEC 363	Canine Evolution, Behavior and Cognition	
ABEC 370	Animal Cognition	
ABEC 404	Wildlife Ecology and Conservation in South Africa	
ABEC 495	Independent Research (Animal Behavior Project)	

ABEC 491	Internship 1 (Animal Behavior based)	
ABEC 492	Internship 2 (Animal Behavior based)	
BIO 366	Ornithology	
BIO 312	Primateology	
BIO 316	Social Organization of Mammals	
Total Credits		18

Anthrozoology Minor

The Anthrozoology minor is designed for students who want to concentrate on mankind's relationships with other animal species. This minor is open to any student from any major.

Required Course

ABEC 419	Anthrozoology	3
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Additional Courses

Select 15 credits from the following: 15

ABEC 330	Animals, Public Policy, and the Law	
ABEC 332	Animal Welfare	
ABEC 334	Conservation Psychology	
ABEC 335	Conservation Education	
ABEC 336	Child Animal Studies	
ABEC 337	Conservation Psychology & Environmental Education	
ABEC 338	Recreational Ecology	
ABEC 363	Canine Evolution, Behavior and Cognition	
ABEC 490	Canisius Ambassadors for Conservation	
ABEC 491	Internship 1 (only if related to anthrozoology)	
ABEC 492	Internship 2 (only if related to anthrozoology)	
ABEC 495	Independent Research (Anthrozoology Project)	
PHI 245	Animal Ethics	
RST 229	Religious Perspectives on Animals	
ENG 285	Animals in Film and Literature	

Total Credits 18

Conservation Minor

The conservation minor is designed for students who want to expand their experience in conservation biology, education, and ecology to prepare for conservation-related careers.

This minor is available to students in any major.

The conservation minor consists of 6 courses.

Choose 2 of the following courses:

BIO 322	Conservation Biology	3
ABEC 333	Conservation Behavior	3
ABEC 335	Conservation Education	3
or ABEC 337	Conservation Psychology & Environmental Education	

Plus at least one class from each of the following 4 tracks:

Track 1: Skills		3-4
BIO 320	Field Ecology	
ABEC 404	Wildlife Ecology and Conservation in South Africa	
Internship in Conservation		
ABEC 491	Internship 1	

ABEC 492	Internship 2	
EVST 498	Internship	
ABEC 335	Conservation Education ¹	
Track 2: Applications		3-4
ABEC 338	Recreational Ecology	
ABEC 341	Urban Ecology	
BIO 375	Community Ecology	
BIO 378	Wetlands	
BIO 406	Population and Conservation Genetics	
BIO 322	Conservation Biology ¹	
ABEC 333	Conservation Behavior ¹	
Track 3: Conservation History		3-4
EVST 250	Nature, Culture and Interpretation	
EVST 259	Environmental History of the United States	
Track 4: Social Science		3-4
COM 348	Environmental Communication	
SOC 234	Environment and Society	
ABEC 334	Conservation Psychology	
ABEC 490	Canisius Ambassadors for Conservation	

¹ Can be taken as a track if not taken as one of the required courses.

Zoo Biology Minor

The Zoo Biology minor is designed for students who want training relevant to careers associated with captive exotic animals. This minor is open to any student from any major.

Required Course

ABEC 251	Zoo Animal Management	3
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Additional Courses

Select 15 credits from the following:		15
ABEC 220	Animal Learning	
ABEC 250	Zoo Animal Husbandry	
ABEC 332	Animal Welfare	
ABEC 337	Conservation Psychology & Environmental Education	
ABEC 339	Animal Enrichment	
ABEC 351	Zoo Exhibitory	
ABEC 360	Observational Research Methods	
ABEC 491	Internship 1 (Zoo/Aquarium based)	
ABEC 492	Internship 2 (Zoo/Aquarium based)	
ABEC 495	Independent Research (Zoo/Aquarium based)	
BIO 150	Animal Nutrition	

Total Credits 18

Anthropology INTRODUCTION

Anthropology is the study of people and how they interact with each other and their environments. It is concerned with all institutions of all societies and is distinguished from other social science disciplines by its emphasis on differences in and between cultures. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please

go to the Anthropology website (<https://www.canisius.edu/academics/programs/anthropology>).

QUALIFICATIONS

Students must have a minimum grade of C in all required courses and maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Anthropology.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Many students who major in anthropology find it desirable to combine it with a major in another department such as biology, classics, fine arts, history, psychology, political science, modern languages or communication studies. The sequence of courses for dual majors is the same as for regular majors. To provide for maximum flexibility of scheduling, students interested in dual majors should consult with a member of the department to arrange their individual schedules.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120

credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Required Courses

ANT 121	Biological Anthropology	3
ANT 122	Sociocultural Anthropology	3
Any Linguistics - Select one of the following:		3
ANT 310	Codebreaking	
ANT 355	Sociolinguistics	
ANT 365	Gender Issues in Language	
ANT 370	Origin and Evolution of Language	
ANT 230	Introduction to Archaeology	3
ANT 351	Qualitative Research Methods	3
ANT 461	Anthropology Capstone	1

Major Electives

Select six of the following:		18
ANT 240	Anthropology and Film	
ANT 290	Anthropology and Evolution	
ANT 300	Special Topics in Anthropology	
ANT 310	Codebreaking	
ANT 333	Forensic Anthropology	
ANT 350	Business Anthropology	
ANT 355	Sociolinguistics	
ANT 365	Gender Issues in Language	
ANT 370	Origin and Evolution of Language	
ANT 399	Field Work	
ANT 499	Independent Study	
Total Credits		34

The following courses count as electives for the anthropology major and minor:

BIO 312	Primatology	3
RST 221	Native American Religions	3
RST 222	African Religions	3
RST 224	Islam: Tradition and Revival	3
RST 360	Magic, Science and Religion	3
SOC 234	Environment and Society	3

ADDITIONAL COURSE CONSIDERATIONS

The department encourages anthropology majors to study a foreign language of their choice and to participate in the college study abroad program.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
ANT 121	ANT 122

Sophomore

Fall	Spring
ANT 230	Any Linguistics
ANT elective	ANT elective

Junior

Fall	Spring
ANT 351	ANT elective
ANT elective	ANT elective

Senior

Fall	Spring
ANT elective	ANT 461

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Majors will think critically about facts, concepts, and issues in anthropology.

Students will:

- **Objective A:** Demonstrate an understanding of the scientific method as applied to the study of anthropology;
- **Objective B:** Demonstrate an understanding of the major approaches to conducting research in the four traditional subfields of anthropology.

Student Learning Goal 2

Majors will acquire the knowledge and skills necessary for graduate studies or careers.

Students will:

- **Objective A:** Demonstrate a familiarity with the major concepts, theories, and theorists in the four major subfields of anthropology;
- **Objective B:** Articulate the role of global awareness in applying anthropological theories and methods in the real world.

Student Learning Goal 3

Majors will demonstrate the importance of global awareness in anthropology.

Students will:

- **Objective A:** Articulate the role of anthropology in the historical development of conceptions of ethics, values and morality within a cross-cultural framework;
- **Objective B:** Demonstrate an understanding of the socio-cultural differences among human groups, including the crucial role of language in human thought and cultural diversity.

The anthropology minor consists of 5 courses:

ANT 121	Biological Anthropology	3
ANT 122	Sociocultural Anthropology	3
ANT 230	Introduction to Archaeology	3
Any Linguistics Course		3
ANT elective		3
Total Credits		15

Students must complete the minor request form.

- ANT 121 Biological Anthropology** 3 Credits
Our species in nature: evolutionary theory, principles of heredity, population genetics, human variations, fossil hominids, primate classification and behavior studies.
Fulfills College Core: Field 6 (Natural Sciences)
Offered: fall & spring.
- ANT 122 Sociocultural Anthropology** 3 Credits
Explores importance of culture in explaining diversity in human behavior and beliefs, looking at variety of societies inhabiting the world. Details the development of the field and the methods and theories employed by socio-cultural anthropologists to better understand humanity.
Fulfills College Core: Field 5 (Social Sciences), Global Awareness
Offered: spring.
- ANT 230 Introduction to Archaeology** 3 Credits
Introduction to the principles, methods, and theoretical approaches of modern archaeology; overview of history and practice of archaeology; how the past is reconstructed; origin of culture and development of social complexity.
Fulfills College Core: Field 5 (Social Sciences), Global Awareness
Offered: fall.
- ANT 240 Anthropology and Film** 3 Credits
A critical survey of both documentary and commercial films on themes in anthropology, e.g. human evolution, ape behavior, socio-cultural change, and the significance of symbolic language for adaptation and survival. Stresses the value of both facts and concepts in an anthropological view of our species.
Offered: spring.
- ANT 290 Anthropology and Evolution** 3 Credits
Concept of evolution in the five major areas of anthropology: biological, archaeology, sociocultural, linguistics, and applied anthropology. This course stresses the value of empirical evidence and critical thinking.
Offered: fall.
- ANT 300 Special Topics in Anthropology** 3 Credits
Critical examination of a selected topic in anthropology. Subject matter determined by the instructor.
Offered: occasionally.
- ANT 310 Codebreaking** 3 Credits
The evolution of codes and the relevance of codes to contemporary society. Covers the history of codes and the achievements of code breakers who deciphered ancient texts. Students will acquire and practice skills needed to identify structural components of codes.
- ANT 333 Forensic Anthropology** 3 Credits
Anthropological methods and information used to survey the origin and history of crime science. Emphasis on the use of well-known case studies in order to understand and appreciate the value of forensic investigation.
Offered: fall.
- ANT 341 Environmental Anthropology** 3 Credits
This course examines how the concept of culture can contribute to our understanding of environmental issues, in terms of how human beings adapt to their environment and the way in which they understand and give meaning to the world they live in. Examines the reciprocal relationship between humans and their habitat.
Fulfills College Core: Advanced Writing-Intensive, Global Awareness
- ANT 350 Business Anthropology** 3 Credits
Applies anthropological theory and methodology in the context of business. Businesses deal with a diverse and fast changing global market place that impacts their products, services, employees, customers and ideas. Anthropological perspective will provide timely and meaningful information to ensure understanding of a global marketplace from a cultural perspective.
Fulfills College Core: Advanced Writing-Intensive, Global Awareness
- ANT 351 Qualitative Research Methods** 3 Credits
Survey of research designs from a qualitative perspective, including field research, participant observation, content analysis, ethnomethodology, and focus groups. Analysis and reporting of qualitative data.
Offered: fall.
- ANT 355 Sociolinguistics** 3 Credits
Investigates the nature of the relationship between social behavior and language change within linguistic communities.
Fulfills College Core: Advanced Writing-Intensive
- ANT 365 Gender Issues in Language** 3 Credits
Explores the intersection of language and gender, examining gender-related stylistic variation in conversation and communication between and among women and men as cross-cultural communication.
- ANT 370 Origin and Evolution of Language** 3 Credits
Surveys theories of the origin and development of language, exploring early perspectives drawn from mythology, religion and philosophy as well as current views emerging from the social and natural sciences.
- ANT 399 Field Work** 3 Credits
Offers practical experience in a variety of social situations and cultural settings. Observations and research logs are used to provide a basis for analysis.
Prerequisite: permission of department chair.
Offered: fall & spring.
- ANT 461 Anthropology Capstone** 1 Credit
Integrating experience for majors; focus is on demonstrating proficiency in the discipline and preparation for post-graduate studies or employment.
Offered: spring.
- ANT 498 Internship** 3 Credits
Internships require an application and approval by the associate dean.
Prerequisite: permission of the chair & associate dean.
- ANT 499 Independent Study** 1-3 Credits
Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
Offered: fall & spring.

Biochemistry

Chair: Mariusz M. Kozik, PhD

INTRODUCTION

Biochemistry graduates enter a variety of professions, including careers in research and industry, the health professions, teaching, technical writing, business, sales, patent law and civil service. A major in biochemistry is an excellent preparation for entrance into medical, dental and pharmacy schools. It also prepares students to enter a range of graduate programs including biochemistry, biotechnology, bioinformatics, medicinal chemistry, bioengineering, business and law.

The Department of Chemistry and Biochemistry offers two tracks that lead to a BS degree in Biochemistry. They are the Biochemistry BS track certified by the American Chemical Society (BCH track certified by ACS) and Biochemistry BS track designed for students who intend to pursue employment in industry (BCH track). Both BCH tracks are appropriate for pre-health professional students.

Advisors in the Department will help you choose the track that best fits your interests and career plans. Students in both program tracks will gain hands-on experience with a wide variety of modern, sophisticated laboratory instrumentation; this helps provide the experience necessary to be competitive in today's job market and/or to gain entrance into highly ranked graduate programs.

Both Biochemistry tracks can be completed with a business minor. This option provides a very useful preparation for employment in sales, marketing, or other industrial professions, as well as preparing students for graduate studies in business or administration.

Please go to the Chemistry and Biochemistry website (<https://www.canisius.edu/academics/programs/chemistry-and-biochemistry>) for a more detailed description of the program, faculty, facilities, and academic and co-curricular opportunities.

QUALIFICATIONS

Students must attain the grade of C or greater in General Chemistry II (CHM 112) and C- or greater in Organic Chemistry II (CHM 228) in order to progress into the major. Several two semester courses (CHM 111 and CHM 112, CHM 227 and CHM 228, BCH 301 and BCH 302) have a requirement for a minimum grade of C- in the first course to continue with the second course.

ADVISEMENT

All students have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are assigned in the freshman year to provide specific major-related advisement in addition to the advisement provided by the student's GRIF 101 facilitator. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

MAJOR EXPERIENCES

Following their freshman year, and sometimes earlier, chemistry and biochemistry majors are encouraged to become involved in research or other professional projects. Stipends are often available so that work can be done on these projects during the summer and school year in the Department. Summer work in industrial laboratories and research institutions is also available. Our close relationship with local industries and institutions aids students in job placement before and after graduation. Students may also choose to undertake industrial internships for advanced elective course credit.

SPECIAL PROGRAMS OFFERED BY THE DEPARTMENT

Early Assurance Program with University at Buffalo Medical School or Syracuse Medical School

Qualified students may apply to the University at Buffalo Medical School or Syracuse University Medical School during their sophomore year. Those accepted will be admitted into the Medical School freshman class after their graduation from Canisius.

Early Assurance Program with University at Buffalo Dental School

Qualified students may apply to the University at Buffalo Dental School during their sophomore year. Those accepted will be admitted into the Dental School freshman class after their graduation from Canisius.

Pre-Medical and Pre-Dental

The Chemistry and Biochemistry BS degrees are excellent preparations for entering into medical and dental schools, and a third of the graduates from this Department enter into these programs. Students applying to medical or dental schools must take the Medical College Admission Test (MCAT) or Dental Admission Test (DAT).

Pre-Pharmacy

For pre-pharmacy students we recommend the Chemistry Health Professions track, since students in this track can meet all pharmacy school entrance requirements. Students applying to most pharmacy schools must take the Pharmacy College Admission Test (PCAT).

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120

credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
CHM 230 & 230L	Analytical Chemistry and Analytical Chemistry Laboratory ¹	4
CHM 244	Inorganic Chemistry	3
CHM 301	Classical Physical Chemistry ²	3
CHM 302 & 302L	Modern Physical Chemistry and Modern Physical Chemistry Laboratory ¹	4
CHM 420	Materials Chemistry ¹	3
BCH 301 & 301L	Introduction to Biochemistry and Introduction to Biochemistry Laboratory	4
BCH 302	Cellular Biochemistry	3
BCH 403 & 403L	Molecular Biology and Molecular Biology Laboratory	4
CHM 381	Scientific Literature and Communication	1
CHM 480	Communicating Concepts in Chemistry	1
CHM 481	Communicating Research Literature	1
Select one of the following:		4
CHM 334 & 334L	Spectrometric Analysis and Spectrometric Analysis Lab	
CHM 430 & 430L	Instrumental Analytical Chemistry and Instrumental Analytical Chemistry Laboratory	
One year of physics:		8
BCH ACS certified track:		
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors II Laboratory	
Other BCH tracks:		
Option 1:		
PHY 201 & 201L	College Physics I and College Physics I Laboratory	
PHY 202 & 202L	College Physics II and College Physics II Laboratory	
Option 2:		
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors II Laboratory	
One year of mathematics: ³		8
BCH ACS certified track:		

MAT 111 & MAT 112	Calculus I and Calculus II	
BCH track:		
Option 1:		
MAT 111	Calculus I	
MAT 141	Inferential Statistics and Computers for Science	
Option 2:		
MAT 111	Calculus I	
MAT 112	Calculus II	
One year of biology: ⁴		8
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	
Total Credits		75

¹ Required only for the ACS certified track.

² ACS track requires CHM 301/CHM 301L.

³ **Note:** Most pharmacy schools require MAT 111 and MAT 141. Some pharmacy schools require MAT 111, MAT 112, and MAT 141.

⁴ **Note:** Most pharmacy schools require BIO 111/BIO 111L and BIO 112/BIO 112L, Microbiology (3), and one year of Anatomy and/or Physiology (6).

MAJOR ELECTIVES

Two major electives are required for Biochemistry track.

Biochemistry elective (3 credits)

(any 300 or 400 level BCH course and some CHM courses except BCH 301, BCH 302 and BCH 403)

Biochemistry or Chemistry elective (3 credits)

No major electives are required for ACS certified track.

BCH 450 or CHM 450 and BCH 451 or CHM 451 can be taken instead of one advanced elective in biochemistry or chemistry.

ADDITIONAL COURSE CONSIDERATIONS

MAT 211 is highly recommended for students interested in pursuing a PhD degree.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

BCH ACS Certified Track

Freshman

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	BIO 112 & 112L
MAT 111	MAT 112

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
CHM 244	PHY 223 & 223L

Junior

Fall	Spring
BCH 301 & 301L	BCH 302
PHY 224 & 224L	CHM 230 & 230L
CHM 381	CHM 480
CHM 420	

Senior

Fall	Spring
CHM 301 & 301L	CHM 430 & 430L ¹
CHM 334 & 334L ¹	CHM 302 & 302L
CHM 481	BCH 403 & 403L

¹ Either CHM 334/CHM 334L or CHM 430/CHM 430L is required.

BCH ACS Certified Track with Business Minor**Freshman**

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	BIO 112 & 112L
MAT 111	MAT 112

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
CHM 244	PHY 223 & 223L
ECO 101	ECO 102
	MAT 141 or ECO 255

Junior

Fall	Spring
BCH 301 & 301L	BCH 302
PHY 224 & 224L	CHM 230 & 230L
CHM 381	CHM 480
CHM 420	MGT 101

Senior

Fall	Spring
CHM 301 & 301L	CHM 430 & 430L ¹
CHM 334 & 334L ¹	CHM 302 & 302L

CHM 481	BCH 403 & 403L
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ACC 201	FIN 201
MKT 201	

¹ Either CHM 334/CHM 334L or CHM 430/CHM 430L is required.

BCH Track**Freshman**

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	BIO 112 & 112L
MAT 111	MAT 141 or 112

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
PHY 201 & 201L	PHY 202 & 202L

Junior

Fall	Spring
BCH 301 & 301L	BCH 302
CHM 244	CHM 480
CHM 381	BCH elective

Senior

Fall	Spring
CHM 301	CHM 430 & 430L ¹
CHM 334 & 334L ¹	BCH 403 & 403L
CHM 481	CHM Elective or BCH Elective

¹ Either CHM 334/CHM 334L or CHM 430/CHM 430L is required.

BCH Track with Business Minor**Freshman**

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	BIO 112 & 112L
MAT 111	MAT 141 or ECO 255

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
PHY 201 & 201L	PHY 202 & 202L
ECO 101	ECO 102

Junior	
Fall	Spring
BCH 301 & 301L	BCH 302
CHM 244	CHM 480
CHM 381	MGT 101
	BCH elective
Senior	
Fall	Spring
CHM 301	CHM 430 & 430L ¹
CHM 334 & 334L ¹	BCH 403 & 403L
CHM 481	CHM or BCH Elective
ACC 201	FIN 201
MKT 201	

¹ Either CHM 334/CHM 334L or CHM 430/CHM 430L is required.

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1:

Knowledge; Department majors will demonstrate an understanding of fundamental chemical concepts.

- Objective A: Concepts; Demonstrate broad knowledge of chemical concepts;
- Objective B: Reactions; Predict and analyze the effects of chemical changes;
- Objective C: Derivations; Manipulate expressions of chemical quantities to derive higher-order relationships;
- Objective D: Safety; Demonstrate knowledge of chemical, instrumental and workplace safety.

Student Learning Goal 2:

Professional Skills; Department majors will be able to work effectively in a professional or laboratory setting.

- Objective A: Scientific Literacy; Identify, access and use chemical literature sources;
- Objective B: Scientific Method; Define chemical problems, then formulate hypotheses and design experiments to address them;
- Objective C: Laboratory Skills; Carry out experiments (follow directions, manipulate materials and lab apparatus, record data);
- Objective D: Laboratory Instrumentation; Use modern instrumentation (prepare samples, operate systems, troubleshoot common problems, organize and label data).

Student Learning Goal 3:

Communication; Department majors will be proficient in the communication of chemical information.

- Objective A: Oral Communication; Construct and deliver an effective oral presentation;
- Objective B: Written Communication; Write an effective, properly formatted scientific report.

BCH 301 Introduction to Biochemistry 3 Credits

Structure and function of biological molecules. Topics include proteins, carbohydrates, nucleic acids, lipids, enzyme kinetics, ligand binding, recombinant DNA technology and cell membrane structure and transport. Three lectures and one recitation per week.

Prerequisite: minimum grade of C- in CHM 228.

Offered: every fall.

BCH 301L Introduction to Biochemistry Laboratory 1 Credit

One four-hour lab per week.

Prerequisite: BCH 301 (or concurrent registration).

Offered: every fall.

BCH 302 Cellular Biochemistry 3 Credits

The more biological aspects of biochemistry. Topics include signal transduction, bioenergetics, metabolism of carbohydrates, lipids, proteins and metabolic control, emphasizing hormones. Three lectures and one recitation per week.

Prerequisite: minimum grade of C- in BCH 301.

Offered: every spring.

BCH 403 Molecular Biology 3 Credits

Biochemical processes at the cellular and molecular level. Topics include DNA structure in chromosomes, replication, repair, and recombination, DNA transcription, RNA structure and function, protein translation and regulation of these processes.

Prerequisite: minimum grade of C- in BCH 301.

Offered: every spring.

BCH 403L Molecular Biology Laboratory 1 Credit

One four-hour lab per week.

Prerequisite: BCH 301L & BCH 403 (or concurrent registration in BCH 403).

Fulfills College Core: Advanced Writing-Intensive

Offered: every spring.

BCH 450 Research in Biochemistry 3 Credits

Independent research under the direction of the biochemistry faculty. Students are required to spend 9 hours per week conducting research. BCH 450 may be taken in place of a biochemistry elective without lab. Research and consultation times to be arranged after approval of department chair.

Prerequisite: permission of department chair.

Offered: fall & spring.

BCH 451 Research in Biochemistry 4 Credits

Independent research under the direction of the biochemistry faculty. Students are required to spend 12 hours per week conducting research. BCH 451 may be taken in place of a biochemistry elective with lab. Research and consultation times to be arranged after approval of department chair.

Prerequisite: permission of department chair.

Offered: fall & spring.

BCH 499 Independent Study 3 Credits

Independent study under the direction of the biochemistry professor. Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

Offered: fall & spring.

Bioinformatics

Director: Debra T. Burhans, PhD

INTRODUCTION

Bioinformatics is an exciting field that involves the application of techniques from computer science, mathematics, statistics and information technology to problems in biology. Bioinformatics is a truly interdisciplinary science that teaches students both practical and conceptual tools for the understanding of biological information. Bioinformatics is important in all areas of biology, from human genetics to ecology, evolutionary biology, epidemiology and structural biology. Bioinformatics is transforming drug discovery, medical diagnostics and other biotechnology related areas. This major is academically rigorous, requiring challenging course work in biology, chemistry, mathematics and computer science. The major is ideal for students interested in learning about and applying mathematical and computational techniques to problem solving in biology.

A degree in bioinformatics from Canisius College provides you with the experience and background required for graduate study or employment in bioinformatics or computer science. Graduates of the program have pursued advanced degrees in bioinformatics, biology, biostatistics, and computer science as well as going on to medical school. They have also found employment in academic and industrial settings. The foundational courses in the major provide a strong general background in computing, biology, and chemistry. Elective courses in the major allow students to specialize in the area of greatest interest to them, whether it is computer science, mathematics, or biology.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Bioinformatics website (<https://www.canisius.edu/academics/programs/bioinformatics>).

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Bioinformatics. In order to proceed in the computer science course sequence students must earn a C or better in CSC 111/CSC 111L. Similar requirements are found for the introductory biology and chemistry sequences.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Some bioinformatics majors have elected a second major in Computer Science. If all bioinformatics elective courses are taken in computer science, students will need an additional 4 courses in Computer Science for the double major. Careful consultation with the advisor is important if this is of interest.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Students with a strong background in mathematics are encouraged to consider a math minor. Please consult as soon as possible with your advisor regarding course selections if you are interested in this possibility. Minimally, students will elect MAT 230 instead of MAT 191 and MAT 351 instead of MAT 141. This major is most suitable for students with AP credit for calculus.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Bioinformatics		
BIF 101L	Introduction to Bioinformatics	1
BIF 400	Bioinformatics Senior Seminar	3
Computer Science		
CSC 111 & 111L	Introduction to Programming and Introduction to Programming Laboratory	4
CSC 112 & 112L	Data Structures and Data Structures Laboratory	4
CSC 213 & 213L	Large Scale Programming and Large Scale Programming Laboratory	4
CSC 310 & 310L	Information Organization and Processing and Information Organization and Processing Laboratory	4
Mathematics		
MAT 111	Calculus I	4
MAT 141	Inferential Statistics and Computers for Science	4
MAT 191	Introduction to Discrete Mathematics	4
Biology		
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4

BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
BIO 212 & 212L	Biochemistry and Cell Biology II and Biochemistry and Cell Biology Lab II	4
Chemistry		
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
Total Credits		60

Note: The BIF 400 course is offered once every two years, and students should plan accordingly. The BIF 400 course carries the Advanced Writing-intensive attribute. If all of the other core courses elected by students have no overlap of attributes students will need to elect 11 additional core courses after taking the four foundational courses. With this in mind, it is important to plan schedules carefully to ensure timely completion of the program. Upper-level Computer Science courses are offered once every other year, and students must ensure that they take CSC 310 as soon as it is offered after their sophomore year.

Elective Courses

Students choose 3 elective courses for the major at the 300-400 level from the list below. Note that as new courses are developed this list may be revised to include additional courses, and that additional courses may be approved on a case by case basis by the program director. Note also that some of these courses may have additional prerequisites not included in the required BIF courses.

Biology

BIO 404	Genetics	3
BIO 408	Biotechnology, Theory in Practice	4
BIO 419	Cell Biology	3
BIO 432	Developmental Biology	3
BIO 450	Molecular Biology	3

Chemistry

CHM 301 & 301L	Classical Physical Chemistry and Classical Physical Chemistry Laboratory	4
CHM 302 & 302L	Modern Physical Chemistry and Modern Physical Chemistry Laboratory	4

Computer Science (all courses with lab)

CSC 330 & 330L	Distributed Computing and Distributed Computing Laboratory	4
CSC 351 & 351L	Comparative Programming Languages and Comparative Programming Languages Laboratory	4
CSC 360 & 360L	Intelligent Systems and Intelligent Systems Laboratory	4
CSC 380 & 380L	Web Development and Web Development Laboratory	4
CSC 395 & 395L	Software Engineering and Software Engineering Lab	4

Mathematics

MAT 341	Numerical Analysis	3
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MAT 351 & MAT 352	Probability & Statistics I and Probability & Statistics II	6
MAT 354	Experimental Design and Statistical Computing	3

Additional Course Considerations

Students interested in medical or dental school or in advanced study in biology should take the second semester of organic chemistry and a year of physics.

CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
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Select one of the following:

PHY 201 & PHY 202	College Physics I and College Physics II (does not require calculus)
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PHY 223 & PHY 224	General Physics for Physical Science Majors I and General Physics for Physical Science Majors II (requires Calculus I)
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Additional recommended math courses for majors include

MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 222	Differential Equations	3

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
BIF 101L	CSC 112 & 112L
CSC 111 & 111L	BIO 112 & 112L
BIO 111 & 111L	CHM 112 & 112L
CHM 111 & 111L	

Sophomore

Fall	Spring
CSC 213 & 213L	MAT 111
BIO 211 & 211L	BIO 212 & 212L
CHM 227 & 227L	MAT 191

Junior

Fall	Spring
MAT 141	BIF 400 (or BIF elective)
BIF elective	CSC 310 & 310L

Senior	
Fall	Spring
BIF elective	BIF elective (or BIF 400 if not taken in junior year)

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Majors will effectively develop and implement computational solutions to problems.

Students will:

- Specify and design acceptable computational solutions;
- Implement and test acceptable computational solutions;
- Describe which data structures would be appropriate to use and explain why, given a problem;
- Describe which algorithms would be appropriate to use and explain why, given a problem;
- Design effective data representations for the storage and manipulation of large datasets where needed;
- Utilize and understand statistical methods for the analysis of large datasets where appropriate.

Student Learning Goal 2

Majors will be competent with respect to biology and biotechnology:

Students will:

- Describe information transfer within cells and between generations;
- Understand high-throughput laboratory technologies used in biology to generate large datasets.

Student Learning Goal 3

Majors will analyze legal, social, and ethical considerations related to bioinformatics.

Students will:

- Understand and analyze issues using different ethical frameworks;
- Understand social, legal, and privacy implications of electronic storage and sharing of biological information.

A minor in Bioinformatics is offered. There are 6 required courses (20 credits) that will also meet the Field 6 and Field 7 (BIO and CSC courses) requirements in the Core Curriculum. The courses are listed below. All of the following courses must include the accompanying laboratory section:

MINOR COURSES

BIF 101L	Introduction to Bioinformatics	1
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
CSC 111 & 111L	Introduction to Programming and Introduction to Programming Laboratory	4
CSC 112 & 112L	Data Structures and Data Structures Laboratory	4
BIF 400	Bioinformatics Senior Seminar	3
Total Credits		20

BIF 101L Introduction to Bioinformatics 1 Credit

This 1 credit course provides an introduction to the field of bioinformatics. Web sites, tools, video, discussions, and visiting speakers will help students learn about the major and current opportunities in terms of jobs and research.

Offered: fall.

BIF 400 Bioinformatics Senior Seminar 3 Credits

This course provides a culminating experience for bioinformatics majors. Students work on several projects where they learn about and use a variety of bioinformatics software as well as building their own tools and pipelines. Students will contribute to a bioinformatics research project about which they will write a scientific article. The writing component introduces skills such as reading primary literature, the development of writing skills appropriate to the field and information literacy techniques.

Restriction: must be junior or senior bioinformatics major.

Fulfills College Core: Advanced Writing-Intensive

Offered: spring of even-numbered years.

BIF 400L Bioinformatics Senior Seminar Lab 1 Credit

This course provides a culminating experience for bioinformatics majors. Students work on several projects where they learn about and use a variety of bioinformatics software as well as building their own tools and pipelines. Students will contribute to a bioinformatics research project about which they will write a scientific article. The writing component introduces skills such as reading primary literature, the development of writing skills appropriate to the field and information literacy techniques. Instruction is carried out through both lecture and lab components.

Restriction: must be junior or senior bioinformatics major.

Offered: spring of even-numbered years.

BIF 499 Bioinformatics Internship 3-4 Credits

Students are strongly encouraged to take part in a bioinformatics internship, which typically would take place in a research laboratory or biotechnology firm. Application and faculty advisor approval required. Note that this course cannot count as a bioinformatics elective for the major.

Biology

Co-Chair: Robert Grebenok, PhD

Co-Chair: Elizabeth Hogan, PhD

INTRODUCTION

The Biology major offers broad training in the biological sciences and balances organismal with cellular/molecular biology. This background serves as a solid preparation for

1. future graduate level education in the biological sciences
2. future professional education in clinical and health-related sciences
3. employment at the bachelor's level
4. additional training in other disciplines that require a thorough understanding of biology, such as various areas of business, communications, engineering, law and social policy development

The biology program of study combines lectures and a hands-on learning experience in both its core and elective courses. The elective courses offered within the major cover a variety of biological fields, which allow students to sample many areas of biology or to investigate more thoroughly specific areas of special interest. In addition, the opportunity to perform independent research with a faculty member in the Biology Department helps develop additional skills not normally offered in undergraduate courses and provides additional opportunities to apply the knowledge acquired in coursework. Please see the website for a more detailed description of

the program, faculty, facilities, academic and co-curricular opportunities. Canisius has developed programs for students interested in Early Assurance Acceptance into the SUNY Upstate (College of Medicine) and Lake Erie College of Osteopathic Medicine (College of Medicine, School of Dental Medicine and School of Pharmacy); Joint Degree Programs with the University at Buffalo (School of Dental Medicine and School of Pharmacy), Lake Erie College of Osteopathic Medicine (College of Medicine, School of Dental Medicine and School of Pharmacy), and SUNY College of Optometry. Canisius also has a Memorandum of Understanding with the Ontario Veterinary College, University of Guelph. In addition, a series of specialized courses have been developed for the non-science major that relate biological concepts and scientific methodologies to societal issues facing humankind as a result of technological advances. For more information please view the department's Biology website (<https://www.canisius.edu/academics/programs/biology>).

QUALIFICATIONS

Students must maintain a 2.0 overall average to graduate with a degree in Biology. Students must attain a C- or greater in each of the introductory courses (BIO 111, BIO 112, and BIO 211) in order to progress into the next course in the Biology sequence. Students must have a C or better in BIO 212 and successfully complete BIO 211L and BIO 212L to take any 400-level Biology courses.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

In addition to academic advisement for the major, advisement relevant to career options in the biological sciences, including pre-clinical and research interests, is also provided.

MAJOR EXPERIENCES

All faculty in the Biology Department are research-active and maintain their own research program at Canisius. Students interested in pursuing research opportunities with Biology faculty are encouraged to speak with individual faculty members about their work and research opportunities in their respective laboratories.

BIOLOGY WITH DISTINCTION

This degree option for the biology program is intended for biology majors who have a true interest in research and may have career interests in biological or biomedical research. Upon graduation they will receive certification of completing their major with distinction. Program requirements include writing of a formal research proposal to be submitted to their thesis committee, completion of the research project (600 research hours minimum), writing the final thesis paper, and presentation of a departmental seminar with verbal thesis defense in front of their committee. Interested students must apply to this program by January of their junior year. See the department chair for complete details including appropriate paperwork.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

The Biology curriculum fulfills all requirements and prepares students well for graduate programs in the biological sciences, and for schools of allopathic (MD) and osteopathic (DO) medicine, dentistry, veterinary medicine, and several allied health programs including, but not limited to, chiropractic, optometry, physician's assistant, and podiatry.

Biology Major Course Requirements

BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
BIO 212 & 212L	Biochemistry and Cell Biology II and Biochemistry and Cell Biology Lab II	4
BIO 351	Biology Seminar I	1
BIO 353	Biology Seminar II	1
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory ¹	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4

CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
PHY 201 & 201L	College Physics I and College Physics I Laboratory	4
PHY 202 & 202L	College Physics II and College Physics II Laboratory	4
Select one of the following mathematics electives options:		8
Option 1:		
MAT 111	Calculus I ¹	
MAT 141 or PSY 201	Inferential Statistics and Computers for Science or Basic Statistics for Behavioral Sciences	
Option 2:		
MAT 111 & MAT 112	Calculus I and Calculus II ¹	
Option 3:		
One year of statistics for sciences		
Total Credits		50

¹ **Note:** The combination of MAT 109 and MAT 110 can be taken in place of MAT 111; likewise, the combination of CHM 109 and CHM 110 can be taken in place of CHM 111.

MAJOR ELECTIVES

Biology Electives

Six 300-level or 400-level lecture courses, four with associated laboratories.

Select at least one course with its associated laboratory from any three of the four Tracks listed below 12

The remaining three biology elective lectures may come from within these areas, or from any other 300- or 400-level elective courses in biology, and at least one must include a laboratory. A student enrolled in three semesters of BIO 301 Research Methods would fulfill this fourth laboratory requirement 10

Total Credits 22

Track I: Animal Biology

BIO 310	Histology and Histophysiology	4
BIO 313	Embryology	4
BIO 314	Comparative Anatomy of Vertebrates	4
BIO 316 & 316L	Social Organization of Mammals and Social Organization of Mammals Lab	4
BIO 324	Human Anatomy	4
BIO 340 & 340L	Physiology and Physiology Laboratory	4
BIO 357 & 357L	Evolution and Evolution Laboratory	4
BIO 365	Vertebrate Zoology and Ecology	4
BIO 366	Ornithology	4

Track II: Biological Diversity

BIO 305 & 305L	Environmental and Pathogenic Microbiology and Environmental and Pathogenic Microbiology Lab	4
BIO 307 & 307L	Microbiology and Microbiology Laboratory	4
BIO 320	Field Ecology	4

BIO 335 & 335L	Plant Biology and Plant Biology Lab	4
BIO 343	Entomology	4
BIO 370 & 370L	Plant Morphology and Plant Morphology Lab	4
BIO 375 & 375L	Community Ecology and Community Ecology Laboratory	4
BIO 377	Freshwater Biology	4

Track III: Cellular Biology

BIO 414 & 414L	Enzymes and Proteins and Enzymes and Proteins Laboratory	4
BIO 418 & 418L	Endocrinology and Endocrinology Laboratory	4
BIO 419 & 419L	Cell Biology and Cell Biology Laboratory	4
BIO 425 & 425L	Cellular Neurobiology and Cellular Neurobiology Laboratory	4
BIO 426 & 426L	Immunochemistry and Immunochemistry Laboratory	4
BIO 432 & 432L	Developmental Biology and Developmental Biology Laboratory	4
BIO 435 & 435L	Developmental Neurobiology and Develop Neurobiology Laboratory	4

Track IV: Genetics/Molecular Biology

BIO 404 & 404L	Genetics and Genetics Laboratory	4
BIO 406 & 406L	Population and Conservation Genetics and Population and Conservation Genetics Laboratory	4
BIO 408	Biotechnology, Theory in Practice	4
BIO 450 & 450L	Molecular Biology and Molecular Biology Laboratory	4

ADDITIONAL COURSE CONSIDERATIONS

It is particularly important that the biology major maintain the indicated required science course sequence to ensure prerequisite requirements are met for upper-level courses and to ensure that all basic requirements have been completed prior to taking standardized graduate/professional school entrance examinations (e.g. GRE, MCAT, DAT). These exams are normally taken late in spring semester of the junior year. Biology majors normally take BIO 111/BIO 112 and CHM 111/CHM 112 in the freshman year, and BIO 211/BIO 212 and CHM 227/CHM 228 in the sophomore year so that they stay on schedule for completing the major requirements. In selecting courses for the major, students should consult carefully with their advisors each semester about the best selection of courses for the coming semesters. In addition, students will want to consult the on-line advisement guide, which is published each semester and contains valuable information about course offerings for the coming semester's offerings.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
BIO 111 & 111L	BIO 112 & 112L
CHM 111 & 111L ¹	CHM 112 & 112L ¹
MAT (calculus or statistics)	MAT (calculus or statistics)

Sophomore

Fall	Spring
BIO 211 & 211L	BIO 212 & 212L
CHM 227 & 227L	CHM 228 & 228L
	BIO 351

Junior

Fall	Spring
PHY 201 & 201L	PHY 202 & 202L
BIO Elective with lab	BIO Elective with lab

Senior

Fall	Spring
BIO Elective with lab	BIO Elective with lab
BIO Elective	BIO Elective
BIO 353	

¹ **Note:** For students who need additional math and or chemistry background, the combination of CHM 109 and CHM 110 can be taken in place of CHM 111. CHM 109 is taken in the fall of the freshman year, CHM 110 & CHM 111L are taken in the spring of the freshman year, and CHM 112 & CHM 112L are taken either in the summer or in the fall of the sophomore year concurrent with CHM 227 & CHM 227L.

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Students will develop competency with respect to knowledge, having a working understanding of basic concepts in the biological sciences.

Students will:

- Objective A: Demonstrate detailed knowledge within at least two areas of biology to be selected among the following: from ecology/evolutionary biology; molecular biology/cellular biology/biochemistry; physiology/organism biology;
- Objective B: Connect previously learned material with current research in biology.

Student Learning Goal 2

Students will develop problem solving skills applicable to the biological sciences.

Students will:

- Objective A: Accurately interpret data;
- Objective B: Design an experiment to address a specific hypothesis;

- Objective C: Critically analyze an article from the original scientific literature or a professional report.

Student Learning Goal 3

Students will demonstrate mastery with respect to technical skills in the biological sciences.

Students will:

- Objective A: Effectively communicate scientific material in a written format;
- Objective B: Effectively communicate scientific material orally;
- Objective C: Draw graphs or design tables to accurately represent scientific information;
- Objective D: Describe or Explain instrumentation and technology appropriate to their course of study.

The Biology Department offers six minors: General Biology, Cell and Molecular Biology, Environmental Biology, Neuroscience, Animal Behavior, and Zoo Biology. Students interested in the Cell and Molecular Biology, Environmental Biology, Neuroscience, or Biology minors should consult with the coordinator of that minor and their departmental advisor to plan the proper course selections. Students interested in the Animal Behavior and Zoo Biology minors should consult with Dr. Sue Margulis, Chair of the Animal Behavior, Ecology and Conservation (ABEC) department. A description of the Animal Behavior and Zoo Biology minors can be located within the ABEC pages (p. 78) of the college catalog. A description of the other minors are listed in the following text.

- General Biology Minor (for non-biology majors) (p. 102)
- Cell and Molecular Biology Minor (p. 102)
- Environmental Biology Minor (p. 102)
- Neuroscience Minor (p. 102)

BIO 109 Nutrition

3 Credits

How food intake influences us as individuals and as components of society, what food is, how we get and use food, processes regulating its use.

Fulfills College Core: Field 6 (Natural Sciences)

BIO 111 Introductory Biology I

3 Credits

Introductory course for freshmen biology and other science majors.

Course provides foundation of evolution, natural selection and heredity, and ecological principles as mechanisms of selection and evolution. Topics include the basis of evolutionary theory, concept of natural selection, evolution of living cells, basic inheritance, biological diversity, intra- and inter-specific interactions between organisms, and interactions between organisms and their environment. Three hours of lecture and a one and a half hour recitation per week.

Fulfills College Core: Field 6 (Natural Sciences)

Offered: every fall.

BIO 111L Introductory Biology Laboratory I

1 Credit

Laboratories in selection, heredity, diversity, population biology and ecology. Also includes introduction to scientific method and scientific writing. Three hours of lab per week.

Corequisite: BIO 111.

Offered: every fall.

<p>BIO 112 Introductory Biology II 3 Credits Introductory course for freshmen biology and other science majors. Course focuses on homeostasis in multicellular organisms through exploring structure and function relationships in plants and animals. Topics include cell interactions in tissues and organs, anatomy and physiology of plants and animals, and the role of natural selection in shaping the anatomy and physiology of plants and animals. Three hours of lecture and a one and a half hour recitation per week. Prerequisite: minimum grade of C- in BIO 111. Offered: every spring.</p>	<p>BIO 131 Biotechnology and Society 3 Credits Relationship between biology, technology, and society. Awareness of the impact of biotechnology on our society. Fulfills College Core: Field 6 (Natural Sciences)</p>
<p>BIO 112L Introductory Biology Laboratory II 1 Credit Laboratories that provide an examination of the structure and function of living organisms (plants and animals). Three hours of lab per week. Corequisite: BIO 112. Offered: every spring.</p>	<p>BIO 132 Genes and People 3 Credits How human characteristics are transmitted and affect future generations. Ethical and legal ramifications of genetic advances. Fulfills College Core: Field 6 (Natural Sciences)</p>
<p>BIO 114 Human Biology: Introduction to Human Anatomy and Physiology 3 Credits Introductory course for those students requiring an understanding of the structure and function of the human body. Course examines the relationships among physiology, anatomy, metabolism, genetics, evolution, the physical environment, and exercise, and how they relate to diet, human health and disease. Three hours of lecture and one three-hour lab per week. Fulfills College Core: Field 6 (Natural Sciences) Offered: fall & spring.</p>	<p>BIO 137 Special Topics in Natural Hist 3 Credits Ecological and evolutionary concepts are explored using specific examples from a particular ecosystem, specifically by focusing on the organisms of an ecosystem and their interactions with each other and the environment.</p>
<p>BIO 114L Human Biology: Introduction to Human Anatomy and Physiology Laboratory 1 Credit One three-hour lab per week. Corequisite: BIO 114. Offered: fall & spring.</p>	<p>BIO 150 Animal Nutrition 3 Credits Nutrition and dietary science focused on the maintainance of wildlife in captivity. Practical examples at our local zoo and aquariums are included. Fulfills College Core: Field 6 (Natural Sciences)</p>
<p>BIO 115 Musculoskeletal Anatomy and Physiology 3 Credits Examination of the anatomy, physiology and biomechanical characteristics of the musculoskeletal components, and associated neural and vascular structures, of the human body. Three hours of lecture and one three-hour lab per week. Prerequisite: minimum grade of C in BIO 114. Offered: fall & spring.</p>	<p>BIO 166 Biology of Birds 3 Credits An introduction to the diversity, behavior, anatomy, and physiology of birds. Students will learn how to identify common local birds. Topics include flight, songs and calls, finding mates, nesting behaviors, and migration. Three hours of lecture per week. Fulfills College Core: Field 6 (Natural Sciences)</p>
<p>BIO 115L Musculoskeletal Anatomy and Physiology Laboratory 1 Credit One three-hour lab per week. Corequisite: BIO 115. Offered: fall & spring.</p>	<p>BIO 211 Biochemistry and Cell Biology I 3 Credits Fundamentals of biochemistry (biological chemistry) and cell biology for students majoring in the biological sciences. Structure and biological activities of proteins and lipids. Integrates the cellular and biochemical relationships between systems within the cell, with an emphasis on membrane transport, signal transduction, and cell motility. Three hours of lecture and a one and a half hour recitation per week. Prerequisite: minimum grade of C- in both BIO 111 & BIO 112; completion of CHM 110 or CHM 111; and CHM 112 (may be taken concurrently). Corequisite: BIO 211L. Offered: every fall.</p>
<p>BIO 116 Disease: Myth and Reality 3 Credits Exploration of causation, treatment and prevention of illness. Objective: to increase awareness and understanding of health and disease. Fulfills College Core: Field 6 (Natural Sciences)</p>	<p>BIO 211L Biochemistry and Cell Biology Lab I 1 Credit Investigative laboratory provides opportunity for students to learn how to isolate, measure, and characterize macromolecules present within a variety of cellular systems. Three hours of lab per week. Corequisite: BIO 211. Offered: fall.</p>
<p>BIO 120 Biology in the News 3 Credits The biological concepts underlying science articles appearing in the current news media, examining these concepts in the context of relevant economic, social and cultural issues. Topics will vary. Fulfills College Core: Field 6 (Natural Sciences) Offered: fall.</p>	<p>BIO 212 Biochemistry and Cell Biology II 3 Credits Fundamentals of biochemistry (biological chemistry) and cell biology for students majoring in the biological sciences. Structure and biological activities of carbohydrates and nucleic acids. Integrates the cellular and biochemical relationships between systems within the cell with an emphasis on the role cell communication, respiration, photosynthesis, gene expression, and cell division. Three hours of lecture and a one and a half hour recitation per week. Prerequisite: minimum grade of C- in BIO 211. Offered: every spring.</p>
<p>BIO 125 Microbes and People 3 Credits The relationship between microbes and their environment as they impact human disease, through food preparation and spoilage and environmental exposure. Fulfills College Core: Field 6 (Natural Sciences)</p>	<p>BIO 212L Biochemistry and Cell Biology Lab II 1 Credit Examination of experimental methodologies that relate the expression and action of various macromolecules to biological processes at the cellular/ molecular level. The role of experimentation in the scientific process is emphasized. Three hours of lab per week. Prerequisite: BIO 211 & minimum grade of D in BIO 211L. Corequisite: BIO 212. Offered: spring.</p>

- BIO 221 Biology of Women** 3 Credits
Biological principles applied to the human female. Structure, function, growth and development throughout the life cycle. Includes relevant social, psychological and medical information. Associated with Women's Studies Program.
Fulfills College Core: Field 6 (Natural Sciences)
Offered: occasionally.
- BIO 298 Pre-clinical Experience for Undergraduates** 1 Credit
Students undertake a substantial shadowing experience in a clinical setting. Must document and complete a minimum of 100 hours of voluntary work with the same clinician within the academic period. An academic component is also required. Student arranges contact with clinician. Application process is required.
Prerequisite: BIO 111, BIO 112, & approval of the department chair.
Offered: fall & spring.
- BIO 300 Research Methods (non-credit)** 0 Credits
Training in experimental methods for the biological sciences under the direct supervision of a faculty member. Each section and research methodologies taught within the section unique to the instruction and research work of a specific faculty member. Requires approval of faculty member for enrollment into an individual section.
Offered: fall, spring, & summer.
- BIO 301 Research Methods (credit)** 1 Credit
Training in experimental methods for the biological sciences under the direct supervision of a faculty member. Each section and research methodologies taught within the section unique to the instruction and research work of a specific faculty member. May be taken in multiple semesters for credit. Requires approval of faculty member for enrollment into an individual section.
Offered: fall, spring, & summer.
- BIO 305 Environmental and Pathogenic Microbiology** 3 Credits
Microbiology course with emphasis on microbes and their ecology in humans, soil and water environments. Topics include diversity and characteristics of microorganisms, techniques used to isolate and study microorganisms, interactions among microbial populations in a variety of microbial communities and ecosystems, human host- microbe interactions, and bioremediation. Three hours of lecture and one and a half hours of recitation per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
- BIO 305L Environmental and Pathogenic Microbiology Lab** 1 Credit
Current approaches and techniques which allow the measurement of microorganisms in the environment. Topics include light microscopy, preparation of culture media and aseptic technique, staining of microorganisms, isolation and culture of specialized groups of bacteria from human, soil and aquatic environments. Interactions between microbial populations, biogeochemical cycling, and assessment of water quality will be discussed. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO112L. **Corequisite:** BIO 305.
- BIO 307 Microbiology** 3 Credits
Cell structure, genetics, biochemistry and physiology of microorganisms, with emphasis on bacteria. Medical microbiology, epidemiology, and some immunology also are discussed.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
- BIO 307L Microbiology Laboratory** 1 Credit
Microbiology laboratory is concerned primarily with the cell structure, growth, physiology and identification of bacteria. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO112L. **Corequisite:** BIO 307.
- BIO 310 Histology and Histophysiology** 4 Credits
A systematic study of structure and function of cells and tissues as viewed by light microscopy. Lab employs tissue slides and digital images. Lab required. Three hours of lecture and one three-hour lab per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
- BIO 312 Primatology** 3 Credits
Primatology is the scientific study of primates. Topics include primate evolution, behavior, ecology, and conservation. Emphasis will be placed on reading and critiquing primary literature.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
Fulfills College Core: Advanced Writing-Intensive
Offered: every fall.
- BIO 313 Embryology** 4 Credits
Emphasis will be on early developmental stages as seen in the invertebrate sea urchin and in the chordate animals, including human embryology. Establishment of the basic vertebrate body plan will be shown by classic models such as the frog, chick and pig. Specific embryological and anatomical knowledge will be gained through macro- and microscopic investigations and dissections. Lab required. Three hours of lecture and three hours of lab per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
- BIO 314 Comparative Anatomy of Vertebrates** 4 Credits
Evolution of chordates, with emphasis on comparative anatomic, functional, and developmental aspects of vertebrate organ systems. The laboratory portion will include dissection of vertebrate specimens including shark, amphibian, cat, and selected mammal organs. Lab required. Three hours of lecture and three hours of lab per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
- BIO 316 Social Organization of Mammals** 3 Credits
Behavior and social structures of rodents, felines, canines, cetaceans, elephants, monkeys, apes and humans. Laboratory includes observation of animal groupings at local zoos and aquariums. Three hours of lecture. Lab optional.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
Offered: fall 2016 and spring 2018.
- BIO 316L Social Organization of Mammals Lab** 1 Credit
Observation of live animal groupings in local zoos and in the wild. Students acquire skills at hypothesis formation and data collection. May include additional fee.
Prerequisite: minimum grade of D in BIO112L. **Corequisite:** BIO 316.
- BIO 317 Sex, Evolution and Behavior** 3 Credits
Reproductive behavior of diverse animal species, including humans, from an evolutionary perspective. Focus on how evolutionary accounts explain male-female differences in life style and behavior.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
Offered: spring 2017 and fall 2017.
- BIO 320 Field Ecology** 4 Credits
Introduction to the flora, fauna and physical characteristics of regional terrestrial and aquatic ecosystems. Emphasis on field methods and implementation of scientific method from data collection, analysis, and data presentation. Introduction to Geographic Information System (GIS) and its applications in ecology. Lab required. Three hours of lecture and six hours of lab per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
Offered: fall of even-numbered years.

<p>BIO 322 Conservation Biology 3 Credits Study of the plight of endangered species, the biological consequences of fragmented populations, and the scientific basis of habitat/species restoration. Prerequisite: minimum grade of C- in BIO 111 & BIO 112. Offered: every spring.</p>	<p>BIO 353 Biology Seminar II 1 Credit Provides opportunities for fourth-year Biology major students to present seminars on research of the primary biological literature. Attendance at departmental seminars required. Meets for 1.5 hours per week. Prerequisite: BIO 351. Fulfills College Core: Oral Communication Offered: every fall.</p>
<p>BIO 324 Human Anatomy 4 Credits A structure/function approach based on what was learned in BIO112, this course will allow the student to increase their conceptual understanding of human anatomy. Lab required. Three hours of lecture and three hours of lab per week. Prerequisite: minimum grade of C- in BIO 111 & BIO 112.</p>	<p>BIO 355 Behavioral Neuroscience 3 Credits Functions of nervous and endocrine systems in mediating motivation, movement, sensation, ingestion, aggression, emotion, sleep, learning, memory, thought and behavior disorders. Prerequisite: minimum grade of C- in BIO 111 & BIO 112. Offered: fall of even-numbered years.</p>
<p>BIO 325 Reproductive Biopsychology 3 Credits Neuro-endocrine mechanisms underlying behavior associated with sex, pregnancy, and parental care. Equal focus on human and non-human behavior. Prerequisite: minimum grade of C- in BIO 111 & BIO 112. Offered: fall of odd-numbered years.</p>	<p>BIO 357 Evolution 3 Credits An in-depth examination of the unifying principles of evolutionary biology. Pre-Darwin ideas about evolution, Darwinian evolution, the Modern Synthesis, and contemporary evolutionary biology. Specific concepts include, but are not limited to, population genetics, speciation, origin of life, phylogenetic analysis, with special emphasis on the evolution of sexual reproduction, virulence evolution, and human evolution. Three hours of lecture per week. Prerequisite: minimum grade of C- in BIO 111 & BIO 112.</p>
<p>BIO 335 Plant Biology 3 Credits Critical examination of the structure, physiology and biochemistry of vascular plants. The interaction of plants with light, water and predators is included. The plants' ability to grow in the face of global climate change is discussed. Prerequisites: minimum grade of C- in BIO 111 & BIO 112.</p>	<p>BIO 357L Evolution Laboratory 1 Credit Examination of fundamental evolutionary processes through a combination of laboratory experiments, simulations, and analysis of experimental data sets. Three hours of lab per week. Prerequisite: minimum grade of D in BIO112L. Corequisite: BIO 357.</p>
<p>BIO 335L Plant Biology Lab 1 Credit Investigative survey of plant structure and function. Three hours of lab per week. Prerequisite: minimum grade of D in BIO112L. Corequisite: BIO 335.</p>	<p>BIO 360 Environmental Health 3 Credits Environmental effects on human health, including biological, physical and chemical hazards in water soil, and air. Course focuses on public health and epidemiological study approaches. Emerging issues also discussed. Prerequisite: minimum grade of C- in BIO 111 & BIO 112.</p>
<p>BIO 340 Physiology 3 Credits Examination of the biochemical, molecular and cellular regulatory mechanisms involved in maintaining stable internal environments required for normal cell, tissue and organ function. Course focuses on cell and organ function, integrated physiological control systems for various organ systems (including cardiovascular, respiratory, GI, renal, reproductive, and immune), and the maintenance of homeostasis. Three hours of lecture per week. Prerequisite: minimum grade of C- in BIO 111 & BIO 112.</p>	<p>BIO 365 Vertebrate Zoology and Ecology 4 Credits The biology of the vertebrates including anatomy, evolution, ecology, natural history and behavior. Labs involve some anatomy, learning local and North American species and groups, and field trips. Lab required. Three hours of lecture and three hours of lab per week. Prerequisite: minimum grade of C- in BIO 111 & BIO 112.</p>
<p>BIO 340L Physiology Laboratory 1 Credit Experimental study of physiological systems, using biochemical, cellular and hematological techniques and electronic instrumentation. Three hours of lab per week. Prerequisite: minimum grade of D in BIO112L. Corequisite: BIO 340.</p>	<p>BIO 366 Ornithology 4 Credits Diversity, relationships, ecology, natural history and the behavior of birds. Laboratory focuses on world-wide diversity, local species and field techniques. Lab required. Three hours of lecture and three hours of lab per week. Prerequisite: minimum grade of C- in BIO 111 & BIO 112.</p>
<p>BIO 343 Entomology 4 Credits Introduction to the diversity and natural history of insects. The structure, function, evolution and ecology of this group are emphasized. Laboratory focuses on anatomy, diversity and classification. Lab required. Three hours of lecture and three hours of lab per week. Prerequisite: minimum grade of C- in BIO 111 & BIO 112.</p>	<p>BIO 370 Plant Morphology 3 Credits Examination of plant morphology and the relationship between morphology, evolution, plant adaptation and plant biology is emphasized. Laboratory focuses on examining morphological features of local and non-local plants in a hands-on-setting. Lab required. Three hours of lecture and three hours of lab per week. Prerequisite: minimum grade of C- in BIO 111 & BIO 112. Corequisite: BIO 370L.</p>
<p>BIO 345 Functional Neuroanatomy 3 Credits Examination of human neuroanatomy, with emphasis on the relationship between neuronal circuits and nervous system function/dysfunction. Three hours of lecture per week. Prerequisite: minimum grade of C- in BIO 111 & BIO 112.</p>	<p>BIO 370L Plant Morphology Lab 1 Credit Required lab for BIO 370. Prerequisite: minimum grade of D in BIO112L. Corequisite: BIO 370.</p>
<p>BIO 351 Biology Seminar I 1 Credit Designed to provide sophomore biology major students with the opportunity to learn various methods of preparing scientific/experimental information for oral presentation. Attendance at departmental seminars required. Meets for 1.5 hours per week. Offered: every spring.</p>	

- BIO 375 Community Ecology** 3 Credits
Examination of how processes in multi-species assemblages affect communities by altering species' abundances, distributions, composition and driving long-term evolutionary change. Both theoretical models and empirical studies are used to illustrate concepts. Three hours of lecture per week.
Prerequisites: minimum grade of C- in BIO 111 & BIO 112.
- BIO 375L Community Ecology Laboratory** 1 Credit
The laboratory reinforces ecological concepts discussed in lecture through computer simulations along with field- collected and experimental data. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO112L. **Corequisite:** BIO 375.
- BIO 377 Freshwater Biology** 4 Credits
Explores the biology of lakes, rivers, and wetlands. Lectures cover the main concepts in freshwater ecology, including the major physical, biological, and biogeochemical characteristics of freshwater environments. Lab required. The laboratory component covers field techniques, laboratory analyses and identification of common aquatic organisms. Three hours of lecture and three hours of lab per week.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
- BIO 378 Wetlands** 3 Credits
Explores the plants, animals and environmental conditions that define wetland environments. The course covers the physical characteristics such as the soils and hydrology, the biological adaptations by plants and animals, and human interaction with these diverse and vibrant ecosystems.
Prerequisite: minimum grade of C- in BIO 111 & BIO 112.
- BIO 378L Wetlands Laboratory** 1 Credit
Optional lab for Wetlands. Meets once a week for three hours.
- BIO 400 Independent Study** 1-3 Credits
Independent study under the direction of a faculty member. Arrangements made prior to registration. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
- BIO 401 Independent Research** 1-4 Credits
Independent laboratory research in biology conducted under the supervision of a faculty member. Arrangements made prior to registration.
Prerequisite: written permission of faculty member & department chair.
- BIO 404 Genetics** 3 Credits
Principles of Mendelian, molecular, population, human and quantitative genetics, with emphasis on inherited diseases. Three hours of lecture and a one and a half hour of recitation per week.
Prerequisite: minimum grade of C- in BIO 212.
- BIO 404L Genetics Laboratory** 1 Credit
Principles of Mendelian and molecular genetics as demonstrated by experiments with *Drosophila* and other experimental organisms. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO212L. **Corequisite:** BIO 404.
Fulfills College Core: Advanced Writing-Intensive
- BIO 405 Medical Genetics** 3 Credits
Study of the molecular basis of human disease, with a particular emphasis placed on those mechanisms underlying inherited diseases. Topics include modes of transmission of human characteristics and diseases, both in families and in populations, developmental and cancer genetics, as well as the techniques utilized for screening, diagnosing and treating specific genetic disorders. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.
- BIO 406 Population and Conservation Genetics** 3 Credits
General introduction to the field of population genetics, the branch of evolutionary biology concerned with the genetic structure of populations and how it changes through time. We will examine the interaction of basic evolutionary processes (including mutation, natural selection, genetic drift, inbreeding, recombination, and gene flow), with special emphasis on their application to species conservation. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.
- BIO 406L Population and Conservation Genetics Laboratory** 1 Credit
Experimental studies designed to explore fundamental concepts in population genetics and their application in conservation. Laboratory is a combination of in vitro *Drosophila* experiments and in silico computer simulations/data analyses.
Prerequisite: minimum grade of D in BIO212L.
- BIO 408 Biotechnology, Theory in Practice** 4 Credits
Introduction to the theory and experiments that are the foundation of biotechnology through lecture and laboratory. Topics include genetic engineering, mutagenesis, separation technology, immunobiotechnology and cell biology. Lab required. Three hours of lecture and three hours of lab per week.
Prerequisite: minimum grade of C- in BIO 212. **Corequisite:** BIO 408L.
- BIO 414 Enzymes and Proteins** 3 Credits
The biochemical characteristics of proteins and enzymes will be examined using a modular approach to target important structural proteins and regulatory enzymes of animal and plant metabolism. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.
- BIO 414L Enzymes and Proteins Laboratory** 1 Credit
Experimental techniques for the purification of proteins, the analysis of protein function and the measurement of enzyme kinetics. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO212L. **Corequisite:** BIO 414.
- BIO 418 Endocrinology** 3 Credits
Synthesis and cellular/molecular actions of peptides and steroid hormones, growth factors, cytokines, and their roles in regulating physiological processes, maintenance of homeostasis and cancer biology. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.
- BIO 418L Endocrinology Laboratory** 1 Credit
Experimental laboratories researching current topics in endocrinology at the molecular, cellular and organismal levels. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO212L. **Corequisite:** BIO 418.
- BIO 419 Cell Biology** 3 Credits
In depth examination of cellular processes, including metabolism, motility, gene expression, protein processing and sorting, signal transduction, cell cycle, cell death, cell renewal and differentiation are discussed. Three hours of lecture per week.
Prerequisite: minimum grade of C- in BIO 212.
- BIO 419L Cell Biology Laboratory** 1 Credit
Experimental laboratories examining different cellular processes, including cytoskeleton, protein localization, and gene expression. Three hours of lab per week.
Prerequisite: minimum grade of D in BIO212L. **Corequisite:** BIO 419.

BIO 420 Phylogenetics	4 Credits	BIO 435 Developmental Neurobiology	3 Credits
Students will learn how to interpret what phylogenetic trees communicate about the evolution of a group of related species, how clues to the history of populations accumulate at the molecular level in DNA, and how statistical models based on this understanding allows us to build phylogenetic trees that reveal evolutionary history to us. Students will also understand how phylogenies allow us to test specific hypotheses concerning evolution. Three hours of lecture and three hours of lab per week.		Cellular and molecular mechanisms underlying development of the nervous system and neurodevelopmental disorders. Topics include: neural induction, neurogenesis, migration, axon guidance, synaptogenesis, and regeneration. Three hours of lecture per week.	
Prerequisite: minimum grade of C- in BIO 212.		Prerequisite: minimum grade of C- in BIO 212.	
BIO 420L Phylogenetics Laboratory	0 Credits	BIO 435L Develop Neurobiology Laboratory	1 Credit
Students will get firsthand experience generating genetic data, building phylogenies, and testing their own hypotheses. To accomplish this, students will work both at the lab bench and on the computer, using a number of programs to manipulate the data they generate. In short, this is a class where evolution, genetics, statistics, and computer science meet.		Experimental studies of the development and regeneration of nervous tissue using neuronal tissue culture and digital microscopy. Three hours of lab per week.	
Prerequisite: minimum grade of D in BIO212L.		Prerequisite: minimum grade of D in BIO212L. Corequisite: BIO 435.	
BIO 424 Epigenetics and Disease	3 Credits	BIO 440 Medical Biochemistry	3 Credits
Epigenetic mechanisms alter how the genome is utilized and it is apparent that this changes between healthy and disease states and may start during development. This course focuses on the impact of environment influences on phenotype via epigenetic changes. Topics include cancer, metabolism and metabolic syndromes, autoimmune disorders and allergies. Three hours of lecture per week.		Biochemistry of disease. Includes examination of pathways and regulatory enzymes that lead to normal and disease states. Three hours of lecture per week.	
Prerequisite: minimum grade of C- in BIO 212.		Prerequisite: minimum grade of C- in BIO 212.	
BIO 425 Cellular Neurobiology	3 Credits	BIO 441 Neurobiology of Nervous System Disorders	3 Credits
Cellular and molecular mechanisms underlying nervous system function. Topics include neuron/glia interactions, signaling within the nervous system, neuroplasticity, and neurodegeneration. Three hours of lecture per week.		Cellular and molecular mechanisms underlying diseases of the nervous system, with an emphasis on emerging therapeutic approaches to treating diseases. Topics covered include: neurodegenerative diseases, neurodevelopmental disorders, infectious diseases, neuropsychiatric illnesses, stroke, and trauma. Three hours of lecture per week.	
Prerequisite: minimum grade of C- in BIO 212.		Prerequisite: minimum grade of C- in BIO 212.	
BIO 425L Cellular Neurobiology Laboratory	1 Credit	BIO 444 Cancer Biology	3 Credits
Experimental laboratories researching current topics in cell and molecular neurobiology. Three hours of lab per week.		The causes of cancer, progression of the disease, and therapeutic approaches will be discussed. Students learn the common features of cancers as well as the distinguishing characteristics of a few specific cancers. Throughout the course therapeutic targets will be identified and novel therapeutic approaches will be discussed. Three hours of lecture per week.	
Prerequisite: minimum grade of D in BIO212L. Corequisite: BIO 425.		Prerequisite: minimum grade of C- in BIO 212.	
BIO 426 Immunochemistry	3 Credits	BIO 450 Molecular Biology	3 Credits
Structural concept of antigenic determinants, immunoglobulin sequences and combining site specificity related to the diversity of the immune response and its control. Three hours of lecture per week.		This course focuses on genomes and nuclear organization and function. Topics include genome content and organization from an evolutionary perspective, epigenetic inheritance, chromatin structure and organization, somatic recombination, and organismal complexity. Three hours of lecture per week.	
Prerequisite: minimum grade of C- in BIO 212.		Prerequisite: minimum grade of C- in BIO 212.	
BIO 426L Immunochemistry Laboratory	1 Credit	BIO 450L Molecular Biology Laboratory	1 Credit
Current methods in immunological research and diagnosis. Designed to present available methodology and insight into the underlying principles. Three hours of lab per week.		Experimental laboratories examining the regulation of gene expression and how regulation affects expression. Three hours of lab per week.	
Prerequisite: minimum grade of D in BIO212L. Corequisite: BIO 426.		Prerequisite: minimum grade of D in BIO212L. Corequisite: BIO 450.	
BIO 432 Developmental Biology	3 Credits	BIO 477 Plants and Society	3 Credits
A study of the basic principles that shape the development of a complex, multicellular organism from a single cell, with a particular emphasis being placed on the underlying cellular and molecular mechanisms. Relevant topics include fertilization, cell fate determination and differentiation, pattern formation, and organogenesis. Three hours of lecture per week.		Various ways in which plants affect human existence. Topics include food products, building (utilitarian) applications, medicinal and poisonous plants, propagation and improvement, roles in ecology. Open to students in any major. This course does not count for the biology major.	
Prerequisite: minimum grade of C- in BIO 212.		Fulfills College Core: Core Capstone	
BIO 432L Developmental Biology Laboratory	1 Credit	BIO 498 Biology With Distinction Thesis	3 Credits
Examination of the cellular and molecular aspects of animal development using classical model organisms. Three hours of lab per week.		Requirement for any student seeking to complete the Biology with Distinction degree option. Must be taken by seniors in the fall or spring of their senior year.	
Prerequisite: BIO 211L & BIO 212L. Corequisite: BIO 432.		BIO 499 Biology Internship	3 Credits
		Provides students with work experience in the biological sciences. Practical application of material taught in biology classes to the work environment. Requires an application and approval by the associate dean.	
		Prerequisite: permission of the department chair & associate dean.	

Cell and Molecular Biology Minor

Coordinator: Lisa Morey, PhD

The Cell and Molecular minor is open to students majoring in biology or chemistry. For students seeking employment at the BS level, a Departmental "Letter of Proficiency in Laboratory Skills" may be requested upon completion of the minor. This letter requires enrollment in either BIO 300 or BIO 301 and the passing of a laboratory skills competency exam given by the instructor.

Students must select **six courses** from the list below. At least four of the six courses must be taken with a laboratory, and no more than four courses and three laboratories may come from one of the two areas: either the Cell or Genetics/Molecular area.

Cell Area

BIO 340	Physiology	3
BIO 414	Enzymes and Proteins	3
BIO 418	Endocrinology	3
BIO 419	Cell Biology	3
BIO 425	Cellular Neurobiology	3
BIO 426	Immunochemistry	3
BIO 432	Developmental Biology	3
BIO 435	Developmental Neurobiology	3
BIO 440	Medical Biochemistry	3

Genetics / Molecular Area

BIO 404	Genetics	3
BIO 405	Medical Genetics	3
BIO 408	Biotechnology, Theory in Practice	4
BIO 424	Epigenetics and Disease	3
BIO 444	Cancer Biology	3
BIO 450	Molecular Biology	3

Environmental Biology Minor

Coordinator: Katie Costanzo, PhD

The Environmental Biology minor is designed for students who want to focus on organismal biology, natural history, ecology and environmental science. It provides a broad preparation for entry into BS level positions in the environmental sciences and advanced study at the graduate level.

The environmental biology minor requires BIO 320 (field ecology with its lab), at least one diversity class with its lab, and four additional upper-level biology classes, at least two of which must include the associated laboratory. Students may choose from the following classes:

BIO 305	Environmental and Pathogenic Microbiology ¹	3
BIO 320	Field Ecology (required of all students)	4
BIO 322	Conservation Biology	3
BIO 335	Plant Biology ¹	3
BIO 343	Entomology ¹	4
BIO 360	Environmental Health	3
BIO 365	Vertebrate Zoology and Ecology ¹	4
BIO 366	Ornithology ¹	4
BIO 370	Plant Morphology ¹	3

BIO 375	Community Ecology	3
BIO 377	Freshwater Biology	4
BIO 378	Wetlands	3

¹ Fulfills the diversity requirement for this minor.

General Biology Minor (for non-biology majors)

Co-Coordinators: Robert Grebenok, PhD and Elizabeth Hogan, PhD

The biology minor may be earned by any student who completes the required courses. Co- and/or prerequisites for some of the required courses may effectively limit accessibility.

Required Courses

BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
BIO 212 & 212L	Biochemistry and Cell Biology II and Biochemistry and Cell Biology Lab II	4

Elective Courses

Select one elective at the 300 level with the associated lab	4
Select one elective at the 400 level with the associated lab	4

Total Credits 24

Neuroscience Minor

Coordinator: Elizabeth Hogan, PhD

The Neuroscience minor may be earned by any student who completes the required courses. Co- and/or prerequisites for some of the required courses may effectively limit accessibility.

Required course

Take one of the following (the other may be used as an elective):

BIO 425 & 425L	Cellular Neurobiology and Cellular Neurobiology Laboratory
BIO 435 & 435L	Developmental Neurobiology and Develop Neurobiology Laboratory

Elective courses (take any 4):

BIO 325	Reproductive Biopsychology
BIO 345	Functional Neuroanatomy
BIO 355	Behavioral Neuroscience
BIO 441	Neurobiology of Nervous System Disorders
PSY 397	Neurobiology of Mental Disorders
PSY 398	Neurobiology of Childhood Mental Disorders
PSY 495	Guided Research in Psychology (if neuroscience-related)
BIO 301	Research Methods (credit) (3 semesters required, must be neuroscience-related)

Chemistry

Chair: Mariusz M. Kozik, PhD

INTRODUCTION

Chemistry or Biochemistry graduates enter a variety of professions, including careers in research and industry, the health professions, teaching, technical writing, business, sales, patent law and civil service. A major in chemistry or biochemistry is an excellent preparation for entrance into medical, dental and pharmacy schools. It also prepares students to enter a range of graduate programs including chemistry, biochemistry, biotechnology, bioinformatics, medicinal chemistry, chemical engineering, environmental science, bioengineering, business and law.

The Department of Chemistry and Biochemistry offers three tracks that lead to a BS degree in Chemistry. They include the Chemistry track that is certified by the American Chemical Society (CHM ACS certified track), Chemistry Health Professions track, and Chemistry track designed for students who intend to pursue employment in industry.

Advisors in the Department will help you choose the track that best fits your interests and career plans. Students in all program tracks will gain hands-on experience with a wide variety of modern, sophisticated laboratory instrumentation; this helps provide the experience necessary to be competitive in today's job market and/or to gain entrance into highly ranked graduate programs.

All Chemistry tracks can be completed with a business minor. This option provides a very useful preparation for employment in sales, marketing, or other industrial professions, as well as preparing students for graduate studies in business or administration

Please go to the Chemistry and Biochemistry website (<https://www.canisius.edu/academics/programs/chemistry-and-biochemistry>) for a more detailed description of the program, faculty, facilities, and academic and co-curricular opportunities.

QUALIFICATIONS

Students must attain the grade of C or greater in General Chemistry II (CHM 112) and C- or greater in Organic Chemistry II (CHM 228) in order to progress into the major. Several two-semester courses (CHM 111 and CHM 112, CHM 227 and CHM 228, BCH 301 and BCH 302) have a requirement for a minimum grade of C- in the first course to continue with the second course.

ADVISEMENT

All students have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are assigned in the freshman year to provide specific major-related advisement in addition to the advisement provided by the student's GRIF 101 facilitator. Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

SPECIAL PROGRAMS OFFERED BY THE DEPARTMENT

Early Assurance Program with University at Buffalo Medical School or Syracuse Medical School

Qualified students may apply to the University at Buffalo Medical School or Syracuse University Medical School during their sophomore year. Those accepted will be admitted into the Medical School freshman class after their graduation from Canisius.

Early Assurance Program with University at Buffalo Dental School

Qualified students may apply to the University at Buffalo Dental School during their sophomore year. Those accepted will be admitted into the Dental School freshman class after their graduation from Canisius.

Pre-Medical and Pre-Dental

The Chemistry and Biochemistry BS degrees are excellent preparations for entering into medical and dental schools, and a third of the graduates from this Department typically enter into these programs. Students applying to medical or dental schools must take the Medical College Admission Test (MCAT) or Dental Admission Test (DAT).

Pre-Pharmacy

For pre-pharmacy students we recommend the CHM Health Professions track, since students in this track can meet all pharmacy school entrance requirements. Students applying to most pharmacy schools must take the Pharmacy College Admission Test (PCAT).

MAJOR EXPERIENCES

Following their freshman year, and sometimes earlier, chemistry and biochemistry majors are encouraged to become involved in research or other professional projects. Stipends for qualified students are often available so that work can be done on these projects during the summer and school year in the Department. Summer work in industrial laboratories and research institutions is also available. Our close relationship with local industries and institutions aids students in job placement before and after graduation. Students may also choose to undertake industrial internships for advanced elective course credit.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in

some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
CHM 230 & 230L	Analytical Chemistry and Analytical Chemistry Laboratory	4
CHM 244	Inorganic Chemistry	3
CHM 301 & 301L	Classical Physical Chemistry and Classical Physical Chemistry Laboratory ¹	4
CHM 302 & 302L	Modern Physical Chemistry and Modern Physical Chemistry Laboratory ²	4
BCH 301	Introduction to Biochemistry	3
BCH 302	Cellular Biochemistry ³	3
CHM 381	Scientific Literature and Communication	1
CHM 480	Communicating Concepts in Chemistry	1
CHM 481	Communicating Research Literature	1
CHM 334 & 334L	Spectrometric Analysis and Spectrometric Analysis Lab ⁴	4
CHM 420 & 420L	Materials Chemistry and Materials Chemistry Laboratory ²	4
CHM 430 & 430L	Instrumental Analytical Chemistry and Instrumental Analytical Chemistry Laboratory ⁴	4
One year of physics:		8
ACS certified track:		
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	
Other CHM tracks:		
Option 1:		
PHY 201 & 201L	College Physics I and College Physics I Laboratory	
PHY 202 & 202L	College Physics II and College Physics II Laboratory	

Option 2:

PHY 223 & 223L General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory

PHY 224 & 224L General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory

One year of mathematics:⁵ 8

ACS certified track:

MAT 111 Calculus I

MAT 112 Calculus II

Other CHM tracks:

Option 1:

MAT 111 Calculus I

MAT 141 Inferential Statistics and Computers for Science

Option 2:

MAT 111 Calculus I

MAT 112 Calculus II

Biology:⁶ 4-8

Health professions track:

BIO 111 & 111L Introductory Biology I and Introductory Biology Laboratory I

BIO 112 & 112L Introductory Biology II and Introductory Biology Laboratory II

Other CHM tracks:

BIO 111 & 111L Introductory Biology I and Introductory Biology Laboratory I

Total Credits 72-76

¹ Lab not required for the Health Professions track

² Required only for the ACS certified track

³ Required only by the Health Professions track

⁴ Not required by the Health Professions track

⁵ **Note:** Most pharmacy schools require MAT 111 and MAT 141. Some pharmacy schools require MAT 111, MAT 112, and MAT 141.

⁶ **Note:** Most pharmacy schools require BIO 111/BIO 111L and BIO 112/BIO 112L, Microbiology (3), and one year of Anatomy and/or Physiology (6).

MAJOR ELECTIVES

Two or three major electives are required by each track.

CHM ACS certified track requires:

- two chemistry electives (6 credits)

CHM track requires:

- three chemistry electives (6 credits)

CHM Health Professions track requires:

- one chemistry elective with lab (4 credits)
- one science elective with lab (4 credits)
- one science elective (3 credits)

Science electives may come from CHM and BCH or from other science departments (BIO, PHY, CSC, MAT). BCH 450 or CHM 450 Research in

Biochemistry or Chemistry (3 credits) and BCH 451 or CHM 451 Research in Biochemistry or Chemistry (4 credits) can be taken instead of one advanced elective in biochemistry or chemistry.

ADDITIONAL COURSE CONSIDERATIONS

MAT 211 is highly recommended for students interested in pursuing a PhD degree. In addition, MAT 219 and MAT 222 are highly recommended for students interested in pursuing a PhD degree in physical, inorganic, or analytical chemistry.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

CHM ACS Certified Track

Freshman

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	PHY 223 & 223L
MAT 111	MAT 112

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
PHY 224 & 224L	CHM 230 & 230L
CHM 244	

Junior

Fall	Spring
CHM 301 & 301L	CHM 302 & 302L
CHM 381	CHM 430 & 430L
CHM 420 & 420L	CHM 480

Senior

Fall	Spring
CHM 334 & 334L	CHM Elective
BCH 301	CHM Elective
CHM 481	

CHM ACS Certified Track with Business Minor

Freshman

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	PHY 223 & 223L
MAT 111	MAT 112

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
PHY 224 & 224L	CHM 230 & 230L
ECO 101	ECO 102
CHM 244	MAT 141 or ECO 255

Junior

Fall	Spring
CHM 301 & 301L	CHM 302 & 302L
CHM 381	CHM 430 & 430L
CHM 420 & 420L	CHM 480
MKT 201	MGT 101

Senior

Fall	Spring
CHM 334 & 334L	CHM Elective
BCH 301	CHM Elective
CHM 481	FIN 201
ACC 201	

CHM Track

Freshman

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L
BIO 111 & 111L	MAT 112 or 141
MAT 111	

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L
PHY 201 & 201L	PHY 202 & 202L

Junior

Fall	Spring
BCH 301	CHM 230 & 230L
CHM 244	CHM Elective
CHM 381	CHM 480

Senior

Fall	Spring
CHM 301 & 301L	CHM 430 & 430L
CHM 334 & 334L	CHM Elective
CHM 481	CHM Elective

CHM Track with Business Minor**Freshman**

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L

BIO 111 & 111L	MAT 141 or ECO 255
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MAT 111

Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L

PHY 201 & 201L	PHY 202 & 202L
	ECO 102

Junior

Fall	Spring
BCH 301	CHM 230 & 230L

CHM 244	CHM Elective
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CHM 381	CHM 480
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ECO 101	MGT 101
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Senior

Fall	Spring
CHM 301 & 301L	CHM 430 & 430L

CHM 334 & 334L	CHM Elective
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CHM 481	CHM Elective
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ACC 201	FIN 201
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MKT 201

CHM Health Professions Track**Freshman**

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L

BIO 111 & 111L	BIO 112 & 112L
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MAT 111	MAT 112 or 141
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Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L

PHY 201 & 201L	PHY 202 & 202L
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Junior

Fall	Spring
BCH 301	CHM 230 & 230L

CHM 244	BCH 302
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CHM 381	CHM 480
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Senior

Fall	Spring
CHM 301	CHM Elective + Lab

CHM 481	SCI elective
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SCI Elective + Lab

CHM Health Professions Track with Business Minor**Freshman**

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L

BIO 111 & 111L	BIO 112 & 112L
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MAT 111	MAT 141 or ECO 255
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Sophomore

Fall	Spring
CHM 227 & 227L	CHM 228 & 228L

PHY 201 & 201L	PHY 202 & 202L
----------------	----------------

ECO 101	ECO 102
---------	---------

Junior

Fall	Spring
BCH 301	CHM 230 & 230L

CHM 381	BCH 302
---------	---------

CHM 244	CHM 480
---------	---------

MKT 201	MGT 101
---------	---------

Senior

Fall	Spring
CHM 301	CHM Elective + Lab

CHM 481	SCI Elective
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ACC 201	FIN 201
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SCI Elective + Lab

LEARNING GOALS AND OBJECTIVES**Student Learning Goal 1:**

Knowledge; Department majors will demonstrate an understanding of fundamental chemical concepts.

Students will:

- Objective A (Concepts): Demonstrate broad knowledge of chemical concepts;
- Objective B (Reactions): Predict and analyze the effects of chemical changes;
- Objective C (Derivations): Manipulate expressions of chemical quantities to derive higher-order relationships;
- Objective D (Safety): Demonstrate knowledge of chemical, instrumental and workplace safety.

Student Learning Goal 2:

Professional Skills; Department majors will be able to work effectively in a professional or laboratory setting.

Students will:

- Objective A (Scientific Literacy): Identify, access and use chemical literature sources;
- Objective B (Scientific Method): Define chemical problems, then formulate hypotheses and design experiments to address them;
- Objective C (Laboratory Skills): Carry out experiments (follow directions, manipulate materials and lab apparatus, record data);
- Objective D (Laboratory Instrumentation): Use modern instrumentation (prepare samples, operate systems, troubleshoot common problems, organize and label data).

Student Learning Goal 3:

Communication; Department majors will be proficient in the communication of chemical information.

Students will:

- Objective A (Oral Communication): Construct and deliver an effective oral presentation;
- Objective B (Written Communication): Write an effective, properly formatted scientific report.

Students majoring in various disciplines such as biology, mathematics, physics, bioinformatics, computer science, psychology and business can benefit from pursuing a minor in chemistry. The chemistry minor requires a student to complete the following sequence of courses:

CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
Select one of the following:		4
CHM 230 & 230L	Analytical Chemistry and Analytical Chemistry Laboratory	
CHM 334 & 334L	Spectrometric Analysis and Spectrometric Analysis Lab	
CHM 430 & 430L	Instrumental Analytical Chemistry and Instrumental Analytical Chemistry Laboratory	
Select one of the following:		
CHM 244	Inorganic Chemistry	
CHM 301	Classical Physical Chemistry	
Select one of the following:		
CHM 300 or 400 level course		
Total Credits		20

CHM 104 Energy, Environment, and Society 3 Credits

Designed to provide a better understanding of energy and our environment, including man's interaction with his environment and the consequences facing society today. This course satisfies the goals and objectives of Field 6, Natural Sciences.

Fulfills College Core: Field 6 (Natural Sciences)

Offered: every fall.

CHM 109 General Chemistry I with Review - Part I 3 Credits

General Chemistry I for science majors, Part I, three lectures and one recitation per week. This course reviews some mathematical concepts, emphasizes dimensional analysis, nomenclature, stoichiometry, solutions, basic chemical reactions, and thermochemistry. This course satisfies the goals and objectives of Field 6, Natural Sciences.

Fulfills College Core: Field 6 (Natural Sciences)

Offered: every fall.

CHM 110 General Chemistry I with Review - Part II 3 Credits

General Chemistry I for science majors, Part II, three lectures, one laboratory, and one recitation per week. This course emphasizes atomic and molecular structure, periodic properties, gas laws, and states of matter. The CHM 109 and CHM 110 sequence is equivalent to CHM 111 and a free elective. Students completing the CHM 109 and CHM 110 sequence are eligible to take CHM 112 in the fall of their sophomore year or during the summer. A minimum grade of C- in CHM 110 is required for both CHM 112 (General Chemistry II) and CHM 227 (Organic Chemistry I).

Prerequisite: minimum grade of C- in CHM 109. **Corequisite:** CHM 111L.

Offered: every spring.

CHM 111 General Chemistry I 3 Credits

General Chemistry I for science majors, three lectures, one laboratory, and one recitation per week. This course is recommended for students with a very good background in mathematics and significant exposure to high school chemistry. The course emphasizes dimensional analysis, nomenclature, stoichiometry, solutions, basic chemical reactions, thermochemistry, atomic and molecular structure, periodic properties, gas laws, and states of matter. A minimum grade of C- in CHM 111 is a prerequisite for both CHM 112 (General Chemistry II) and CHM 227 (Organic Chemistry I). This course satisfies the goals and objectives of Field 6, Natural Sciences.

Prerequisite: minimum score of 580 in MSAT or permission of instructor.

Corequisite: CHM 111L.

Fulfills College Core: Field 6 (Natural Sciences)

Offered: every fall.

CHM 111L General Chemistry I Laboratory 1 Credit

One three-hour lab per week.

Corequisite: CHM 110 or CHM 111.

Offered: every fall.

CHM 112 General Chemistry II 3-4 Credits

General Chemistry II for science majors, three lectures, one laboratory, and one recitation per week. The course emphasizes properties of solutions, kinetics, chemical equilibrium concepts, calculations involving acid/base and precipitation equilibria, thermodynamics, electrochemistry, nuclear chemistry, and chemistry of the environment. A minimum grade of C in CHM 112 is required for all chemistry and biochemistry majors. This course satisfies the goals and objectives of Field 6, Natural Sciences.

Prerequisite: minimum grade of C- in either CHM 110 or CHM 111.

Corequisite: CHM 112L.

Fulfills College Core: Field 6 (Natural Sciences)

Offered: every fall & spring.

CHM 112L General Chemistry II Laboratory 1 Credit

One three-hour lab per week.

Prerequisite: minimum grade of C- in CHM 111L. **Corequisite:** CHM 112.

Offered: every fall & spring.

CHM 227 Organic Chemistry I	3 Credits	CHM 244 Inorganic Chemistry	3 Credits
Fundamental treatment of organic chemistry. Includes bonding, structure, nomenclature and stereochemistry of organic functional groups. Introduces mechanisms and reactivity in substitution and elimination reactions. Laboratory covers techniques of separation, purification and analysis of organic compounds. Three lectures, one laboratory, and one recitation per week.		Electronic configuration of atoms, periodic classification of the elements, nature of chemical bonding, symmetry and application of group theory to molecular orbitals, structures and thermodynamics of solids, bonding in metals and semiconductors, acid/base concepts, electrochemistry, isomerism, bonding, reactions and spectroscopy of coordination compounds, and other aspects of modern inorganic chemistry. Three lectures and one recitation per week.	
Prerequisite: minimum grade of C- in either CHM 110 or CHM 112.		Prerequisite: minimum grade of C in CHM 112.	
Corequisite: CHM 227L.		Offered: every fall.	
Offered: every fall.			
CHM 227L Organic Chemistry I Laboratory	1 Credit	CHM 301 Classical Physical Chemistry	3 Credits
One three-hour lab per week.		Principles of thermodynamics with applications to phase and chemical equilibria. Kinetic theory of gases and chemical kinetics. Three lectures and one recitation per week.	
Prerequisite: minimum grade of C- in CHM 111L. Corequisite: CHM 227.		Prerequisite: minimum grade of C in CHM 112, successful completion of MAT 111 or MAT 110, and a year of physics (PHY 201 & PHY 202 or PHY 223 & PHY 224).	
Offered: every fall.		Offered: every fall.	
CHM 228 Organic Chemistry II	3 Credits	CHM 301L Classical Physical Chemistry Laboratory	1 Credit
Fundamental treatment of organic chemistry. Includes chemistry and reaction mechanisms of unsaturated compounds, and oxygen and nitrogen-containing functional groups. Introduces the organic chemistry of carbohydrates, lipids and peptides. Laboratory expands on techniques for the synthesis, purification and investigation of the chemical properties of organic compounds. Three lectures, one laboratory, and one recitation per week.		Selected experiments demonstrating principles of thermodynamics and chemical kinetics. One four-hour lab per week.	
Prerequisite: minimum grade of C- in CHM 227. Corequisite: CHM 228L.		Prerequisite: minimum grade of C in CHM 230L & C in CHM 301 (or concurrent registration in CHM 301).	
Offered: every spring.		Fulfills College Core: Advanced Writing-Intensive	
CHM 228L Organic Chemistry II Laboratory	1 Credit	Offered: every fall.	
One three and a half-hour lab per week.		CHM 302 Modern Physical Chemistry	3 Credits
Prerequisite: minimum grade of C- in CHM 227L. Corequisite: CHM 228.		Introduction to quantum chemistry with applications to the structure of atoms and molecules. Molecular spectroscopy. Three lectures and one recitation per week.	
Offered: every spring.		Prerequisite: minimum grade of C in CHM 112, successful completion of MAT 111 or MAT 110; MAT 112; and a year of physics (PHY 201 & PHY 202 or PHY 223 & PHY 224).	
CHM 230 Analytical Chemistry	3 Credits	Offered: every spring.	
Principles and methodology of modern analytical chemistry presented with particular emphasis on statistical error analysis, solution equilibrium, and potentiometry. Three lectures, one laboratory, and one recitation per week.		CHM 302L Modern Physical Chemistry Laboratory	1 Credit
Prerequisite: minimum grade of C in CHM 112. Corequisite: CHM 230L.		Selected spectroscopy experiments with applications to molecular structure. One four-hour lab per week.	
Offered: every spring.		Prerequisite: CHM 302 (or concurrent registration in CHM 302) & minimum grade of C in CHM 230L, CHM 301L, CHM 334L or CHM 430L.	
CHM 230L Analytical Chemistry Laboratory	1 Credit	Offered: every spring.	
One four-hour lab per week.		CHM 334 Spectrometric Analysis	3 Credits
Corequisite: CHM 230.		Spectrometric methods for the elucidation of chemical structures. Includes nuclear magnetic resonance, infrared, ultraviolet and mass spectrometry. Emphasis on organic compounds. Three lectures and one laboratory per week.	
Offered: every spring.		Prerequisite: CHM 228.	
CHM 232 Environmental Analytical Chemistry	3 Credits	Offered: every fall.	
Environmental applications of analytical chemistry. Sampling techniques and statistical analysis of data. Soil chemistry, aquatic chemistry and atmospheric chemistry. Trace analysis with electroanalytical, liquid and gas chromatography, atomic absorption spectroscopy and ion selective electrodes. Three lectures, one laboratory and one recitation per week.		CHM 334L Spectrometric Analysis Lab	1 Credit
Prerequisite: CHM 112. Corequisite: CHM 232L.		One four-hour lab per week.	
Offered: spring 2017.		Prerequisite: CHM 228L.	
CHM 232L Environmental Analytical Chemistry Laboratory	1 Credit	Offered: every fall.	
One four-hour lab per week.		CHM 338 Intermediate Organic Chemistry	3 Credits
Prerequisite: CHM 112L. Corequisite: CHM 232.		Important basic concepts in organic chemistry are reviewed at a higher level than is possible in the introductory courses. New concepts are presented in the areas of reaction mechanisms, frontier molecular orbitals, physical organic chemistry, and in stereoelectronic effects.	
Offered: spring 2017.		Prerequisite: CHM 228.	
		Offered: fall 2017.	

- CHM 344 Metal Ions in Biological Systems** 3 Credits
Chemical processes in biological systems, which include participation of metal ions, are covered. The course begins with the principles of coordination chemistry and structural biochemistry. The rest of the course is organized according to the functions performed by the metal centers: gene expression and signal transduction, digestion, bioenergetics and electron transfer, oxygen transport, liver functions and anticancer drugs.
Prerequisite: CHM 228.
Offered: occasionally in spring.
- CHM 381 Scientific Literature and Communication** 1 Credit
First of three student-faculty seminars for majors. Introduces scientific literature, technical writing and oral communication in chemistry and allied fields.
Prerequisite: CHM 228 & junior standing.
Offered: every fall.
- CHM 401 Modern Synthetic Methods** 3 Credits
Structure-reactivity relationships in organometallic chemistry and the application of organometallic compounds in organic synthesis, including industrial catalysis.
Prerequisite: CHM 228 & CHM 244.
Offered: occasionally in spring.
- CHM 401L Modern Synthetic Methods Laboratory** 1 Credit
Designed to illustrate some of the most important synthetic and physical techniques used by modern synthetic chemists.
Prerequisite: CHM 401 (or concurrent registration).
Offered: occasionally in spring.
- CHM 402 Advanced Physical Chemistry** 3 Credits
Introduction to statistical thermodynamics. Applications of group theory to chemical bonding and molecular spectroscopy. Angular momentum coupling in atomic and molecular spectroscopy. Three lectures per week.
Prerequisites: MAT 111 & MAT 112; CHM 244; CHM 302 (may be taken concurrently); and either PHY 201 & PHY 202 or PHY 223 & PHY 224.
Offered: Spring 2017.
- CHM 420 Materials Chemistry** 3 Credits
A survey of topics and applications in modern materials chemistry including solid state materials, semiconductors, polymers, nanomaterials, and introductions to mechanical properties, device fabrication, and structure-activity relationships.
Prerequisite: CHM 228 & CHM 244 (or concurrent registration in CHM 244). **Corequisite:** CHM 420L.
Offered: fall 2016.
- CHM 420L Materials Chemistry Laboratory** 1 Credit
One four-hour lab per week.
Prerequisite: CHM 228L. **Corequisite:** CHM 420.
Offered: fall 2016.
- CHM 430 Instrumental Analytical Chemistry** 3 Credits
Advanced instrumental methods of analysis including spectroscopy, chromatography and various electrochemical techniques. Three lectures and one laboratory per week.
Prerequisite: CHM 112 & CHM 228 (or concurrent registration in CHM 228).
Offered: every spring.
- CHM 430L Instrumental Analytical Chemistry Laboratory** 1 Credit
One four-hour lab per week.
Prerequisite: CHM 112L & CHM 228L (or concurrent registration in CHM 228L). **Corequisite:** CHM 430.
Offered: every spring.
- CHM 450 Research in Chemistry** 3 Credits
Independent research under the direction of the chemistry faculty. Students are required to spend 9 hours per week conducting research. CHM 450 may be taken in place of a chemistry elective without lab. Research and consultation times to be arranged after approval of department chair.
Prerequisite: permission of department chair.
Offered: fall & spring.
- CHM 451 Research in Chemistry** 4 Credits
Independent research under the direction of the chemistry faculty. Students are required to spend 12 hours per week conducting research. CHM 451 may be taken in place of a chemistry elective with lab. Research and consultation times to be arranged after approval of department chair.
Prerequisite: permission of department chair.
Offered: fall & spring.
- CHM 455 Medicinal Chemistry** 3 Credits
Chemical principles are used to explain the interaction of drugs with biological targets. Strategies used in the design and development of medicines are discussed.
Prerequisite: minimum grade of C- in both CHM 228 & BCH 301.
Offered: spring 2017.
- CHM 480 Communicating Concepts in Chemistry** 1 Credit
Second of three student-faculty seminars for majors. Students give a 25-minute presentation on an advanced coursework topic. Emphasis is placed on the process and the mechanics of constructing a scientific talk.
Prerequisite: CHM 228 & junior standing.
Offered: every spring.
- CHM 481 Communicating Research Literature** 1 Credit
Third of three student-faculty seminars for majors. Students give a 45-minute presentation on a scientific work from the chemical literature. Emphasis is placed on constructing a narrative and gaining a working understanding of the scientific issues in the presented paper.
Prerequisite: CHM 228 & junior standing.
Fulfills College Core: Oral Communication
Offered: every fall.
- CHM 490 Chemistry Internship** 3 Credits
Internships in chemical or biochemical industry under the direction of company and faculty supervisors.
Prerequisite: permission of department chair & associate dean.
Offered: fall & spring.
- CHM 499 Independent Study** 3-4 Credits
Independent study under the direction of the chemistry faculty. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.
Offered: fall & spring.

Classics

Chair: Thomas M. Banchich, PhD

INTRODUCTION

The Classics major at Canisius is designed to accommodate students interested in both ancient Greek and Roman culture. We offer three tracks of study: Greek Language and Hellenic Studies (CLSG), Latin Language and Roman Studies (CLSL), and Classical Studies (CLSS). Please see the Classics website (<https://www.canisius.edu/academics/programs/classics>) for a more

detailed description of the program, faculty, facilities, academic and co-curricular opportunities.

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Classics.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

MAJOR EXPERIENCES

Classics majors and minors are encouraged to become members of the Canisius Classics Club and to attend the weekly departmental Classics Tea@2. The department also offers the opportunity for Classics majors and minors to become members of Eta Sigma Phi, the national Classics Honor Society.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

A major in Classics is a perfect complement to other majors in a broad range of disciplines — particularly Anthropology, Art History, Creative Writing, English, European Studies, History, Modern Languages, Political Science, Philosophy, and Religious Studies — and a worthwhile second major for students interested in careers in law or medicine.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

All Classics Majors

CLS 103 or CLS 104	Greek History Roman History	3
CLS 205 or CLS 206	Mirror of the Past: Greece Mirror of the Past: Rome	3
Tracks		
Select one of the following:		30
Greek Language and Hellenic Studies Track/CLSG		
Latin Language and Roman Studies Track/CLSL		
Classical Studies Track/CLSS		
Total Credits		36

Greek Language and Hellenic Studies Track/CLSG

6 Classical Greek/CLG courses (at least 6 credits at the 300 level or above)	18
4 Classics/CLG/CLL/CLS electives (no more than two of which may be Interdepartmental)	12
Total Credits	30

Latin Language and Roman Studies Track/CLSL

6 Latin/CLL courses (at least 6 credits at the 300 level or above)	18
4 Classics/CLG/CLL/CLS electives (no more than two of which may be Interdepartmental)	12
Total Credits	30

Classical Studies Track/CLSS

4 Classical Greek/CLG OR 4 Latin/CLL courses (at least 6 credits at the 200 level or above)	12
6 Classics/CLG/CLL/CLS electives (no more than two of which may be Interdepartmental)	18
Total Credits	30

MAJOR ELECTIVES

Any CLG, CLL, or CLS course not used as a required course within the major may serve as a Classics elective.

DEPARTMENTAL ELECTIVES

CLG 101	Elementary Greek I ¹	3
CLG 102	Elementary Greek II ¹	3
CLG 201- CLG 218 ¹		3
CLG 301- CLG 318 ¹		3
CLG 400	Paideia ¹	3
CLL 101	Elementary Latin ²	3
CLL 102	Elementary Latin II ²	3
CLL 400	Humanitas	3
CLL 201- CLL 218 ²		3

CLL 301- CLL 318 ²		
CLS 103	Greek History	3
CLS 104	Roman History	3
CLS 205	Mirror of the Past: Greece	3
CLS 206	Mirror of the Past: Rome	3
CLS 207	Mythology and Literature	3
CLS 214	Greek and Roman Tragedy	3
CLS 300	Roman Law and Society	3
CLS 301	The Age of Cicero	3
CLS 308	Pagans and Christians	3
CLS 309	Greek and Roman Religion	3
CLS 311	Alexander the Great	3
CLS 312	The Greek Enlightenment	3

¹ 6 CLG credits strongly recommended for students on CLS-Latin track.

² 6 CLL credits strongly recommended for students on CLS-Greek track.

INTERDEPARTMENTAL ELECTIVES

ANT 230	Introduction to Archaeology	3
FAH 101	Cave Paintings, the Colosseum & Cathedrals	3
FAH 210	Ancient Egyptian and Near Eastern Art	3
FAH 213	Greek and Roman Art	3
HIS 106	The Medieval World	3
HIS 203	Castles, Bones and Battleaxes: Material Culture of the Medieval World	3
HON 110	Western Tradition I	3
PHI 301	Ancient Philosophy	3
PHI 302	Medieval Philosophy	3
RST 201	Introduction to the New Testament	3
RST 325	Early Christianity	3

ADDITIONAL COURSE CONSIDERATIONS

Classics majors who are interested in pursuing graduate work in Classics are encouraged to enroll in German and French language courses.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
CLS 103 or 205	CLS 104 or 206
Select one of the following:	Select one of the following:
CLSG: CLG 101	CLSG: CLG 102
CLSL: CLL 101	CLSL: CLL 102

Sophomore

Fall	Spring
CLS 207 (or other major elective)	CLS 207 (or other major elective)
Select one of the following:	Select one of the following:
CLSG: CLG 200 level	CLSG: CLG 200-level
CLSL: CLL 200-level	CLSL: CLL 200-level

Junior

Fall	Spring
CLSG: CLG 200 or 300-level	CLSG: CLG 300-level
Select one of the following:	Select one of the following:
CLL 101	CLL 102
CLSL: CLL 200 or 300-level	CLSL: CLL 300-level
CLG 101	CLG 102
Major elective	Major elective
Senior	
Fall	Spring
Select one of the following:	Select one of the following:
CLSG: CLG 300-level	CLSG: CLG 400
CLSL: CLL 300-level	CLSL: CLL 400
Major elective	Major elective

LEARNING GOALS & OBJECTIVES

Learning Goal 1

Students will develop proficiency in ancient Greek and/or Latin.

Students will:

- Objective A: Demonstrate mastery of vocabulary, lexical skills, grammar, and syntax.
- Objective B: Produce a sound English translation of a Greek or Latin text which illustrates clear understanding of the text's meaning.

Learning Goal 2

Students will develop a command of ancient Greek and/or Roman literature and history.

Students will:

- Objective A: Distinguish various features associated with major Greek and/or Latin authors and literary genres.
- Objective B: Contextualize various people, events, and artifacts important to the study of Greek and/or Roman history and historiography.

Learning Goal 3

Students will develop proficiency in the use of reference works and databases central to the discipline of Classics.

Students will:

- Objective A: Compile a bibliography on a classical subject, work, or author using standard Classics reference works and databases.
- Objective B: Compile references to specific Greek and/or Latin words or phrases using standard Classics reference works and databases.

A minor in Classics is especially appropriate for students of Archaeology, Anthropology, Art History, Creative Writing, English, History, Political Science, Philosophy, and Religious Studies. Students must complete the appropriate minor request form.

CLASSICS MINORS

Students who wish to minor in Classics must meet the following requirements:

Classical Language

Two semesters of Latin or Greek (CLL OR CLG)	6	
CLS 103	Greek History	3

or CLS 104	Roman History	
CLS 205	Mirror of the Past: Greece	3
or CLS 206	Mirror of the Past: Rome	
Classics Electives		
Select two upper-level electives from the following:		6
Any CLG, CLL CLS courses at the 200-level or above		
FAH 210	Ancient Egyptian and Near Eastern Art	
FAH 213	Greek and Roman Art	
Total Credits		18

Classics - CLS (p.); Greek - CLG (p.); Latin - CLL (p.)

CLASSICS - CLS

CLS 103 Greek History 3 Credits

Social, political, and intellectual history of the Greeks from the end of the Bronze Age to the Hellenistic period.

Fulfills College Core: Field 4 (History), Global Awareness

Offered: every fall.

CLS 104 Roman History 3 Credits

Social, political, and intellectual history of Rome from the foundation of the city to late antiquity.

Fulfills College Core: Field 4 (History), Global Awareness

Offered: every spring.

CLS 205 Mirror of the Past: Greece 3 Credits

Fundamental social, political, moral, religious, and intellectual aspects of the human condition as reflected in a variety of Greek writers, art, and artifacts.

Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness

Offered: every fall.

CLS 206 Mirror of the Past: Rome 3 Credits

Fundamental social, political, moral, religious, and intellectual aspects of the human condition as reflected in a variety of Roman writers, art, and artifacts.

Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness

Offered: every spring.

CLS 207 Mythology and Literature 3 Credits

Origin, content, and interpretation of the major classical myths. Modern approaches to mythology. Influence upon literature and ethical principles and theories.

Fulfills College Core: Ethics, Field 3 (Literature and the Arts)

Offered: fall & spring.

CLS 209 Greek and Roman Archaeology 3 Credits

History, methods, major sites, and current topics in Greek and Roman Archaeology from the Bronze Age through Late Antiquity.

Fulfills College Core: Field 5 (Social Sciences), Global Awareness

Offered: spring 2017.

CLS 214 Greek and Roman Tragedy 3 Credits

Study of Greek and Roman tragedy, its origins, cultural setting, staging, performance, and influence. Readings from Aeschylus, Sophocles, Euripides, and Seneca.

Fulfills College Core: Ethics, Field 3 (Literature and the Arts), Oral

Communication

Offered: fall & spring.

CLS 300 Roman Law and Society 3 Credits

Exploration of major concepts and principles of Roman law and the society in which they developed. Studies of cases from the writings of Roman jurists.

Fulfills College Core: Field 5 (Social Sciences), Justice, Oral Communication

Offered: anticipated spring 2017.

CLS 301 The Age of Cicero 3 Credits

An introduction to Roman literature and society in the first century B.C. with a focus on the development of the genres of Latin literature and the relationship between politics and literature.

Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)

Offered: anticipated fall 2018.

CLS 308 Pagans and Christians 3 Credits

Religious thought and action from the 3rd through 8th centuries A.D. The idea of the holy; manifestations of the sacred; body, soul, and cosmos; Christianity and classical culture; Neoplatonism.

Fulfills College Core: Field 1 (Religious Studies and Theology), Global Awareness

Offered: spring 2017.

CLS 309 Greek and Roman Religion 3 Credits

Religious thought and action in ancient Greece and Rome from Homer through the 2nd century A.D. Polytheism, anthropomorphism, ritual, cult and sacrifice.

Fulfills College Core: Field 1 (Religious Studies and Theology), Global

Awareness, Oral Communication

Offered: every fall.

CLS 311 Alexander the Great 3 Credits

Philip II and the rise of Macedon. Alexander's personality, his conquests, and the social, political, and intellectual consequences of his reign. Hellenistic culture.

Fulfills College Core: Global Awareness

Offered: anticipated fall 2018.

CLS 312 The Greek Enlightenment 3 Credits

Greek thought from Homer to Plato. Lyric poets, Hippocratic texts, Presocratics and Sophists, Athenian tragedy, Thucydides, Aristophanes, and Plato. Impact of literacy on Greek thought. Greek philosophy in its social and historical context.

Fulfills College Core: Field 2 (Philosophy)

Offered: anticipated fall 2017.

CLS 499 Independent Study 3-6 Credits

Directed research on a selected topic. Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

Offered: occasionally.

GREEK - CLG

CLG 101 Elementary Greek I 3 Credits

Intensive introduction to the grammar, syntax, and vocabulary of classical Greek. Selected readings. Fall.

Offered: every fall.

CLG 102 Elementary Greek II 3 Credits

Intensive introduction to the grammar, syntax, and vocabulary of classical Greek. Selected readings.

Prerequisite: CLG 101 or permission of instructor.

Offered: every spring.

CLG 203 Greek Literature: Homer 3 Credits

Selected readings from Homer.

Prerequisite: CLG 102 or permission of instructor.

CLG 208 Greek Historians 3 Credits

Selected Greek historical authors, genres, or themes.

Prerequisite: CLG 102 or permission of instructor.

CLG 209 Greek Historians: Xenophon	3 Credits	CLL 207 Latin Literature	3 Credits
Selected readings from Xenophon.		Readings in selected Latin literary authors, genres, or themes.	
Prerequisite: CLG 102 or permission of instructor.		Prerequisites: at least two years of Latin in high school through the senior year, or CLL 102, or permission of instructor.	
CLG 213 Greek Philosophers	3 Credits	CLL 210 Roman Historians	3 Credits
Book I of Plato's Republic and related texts.		Selections from Livy.	
Prerequisite: CLG 102 or permission of instructor.		Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.	
CLG 303 Readings in Greek: Homer	3 Credits	CLL 211 Latin Biography	3 Credits
Selected readings from Homer.		Selections from Latin biographers.	
Prerequisite: CLG 102 or permission of instructor.		Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.	
CLG 305 Readings in Greek Literature: Daphnis and Chloe	3 Credits	CLL 213 Roman Philosophers	3 Credits
Longus' Daphnis and Chloe.		Selected Roman philosophical authors, genres, or themes.	
Prerequisite: CLG 102 or permission of instructor.		Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.	
CLG 306 Readings in Greek Literature	3 Credits	CLL 301 Readings in Latin Literature	3 Credits
Selected Greek historical authors, genres, or themes.		Selected Latin literary authors, genres, or themes.	
Prerequisite: CLG 102 or permission of instructor.		Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.	
CLG 307 Readings in Greek Literature	3 Credits	CLL 304 Readings in Latin Literature	3 Credits
Selected Greek literary authors, genres, or themes.		Selected Latin literary authors, genres, or themes.	
Prerequisites: CLG 102 or permission of instructor.		Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.	
Offered: occasionally.		CLL 305 Readings in Latin Literature	3 Credits
CLG 308 Readings in Greek History: Sources for Athenian History	3 Credits	Selected Latin literary authors, genres, or themes.	
Selected Inscriptions and portions the Constitution of Athens attributed to Aristotle.		Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.	
Prerequisite: CLG 102 or permission of instructor.		CLL 400 Humanitas	3 Credits
CLG 400 Paideia	3 Credits	Selected Latin authors, texts, themes, or genres.	
Selected Greek authors, texts, themes, or genres.		Prerequisite: at least two semesters of CLL courses, completion of core requirements, & permission of the chair.	
Prerequisite: at least two semesters of CLG courses, completion of all other core curriculum requirements, & permission of the chair or instructor.		Fulfills College Core: Core Capstone	
CLG 499 Independent Study: Greek	3 Credits	Offered: fall & spring.	
Directed research on a selected topic. Independent studies require an application and approval by the associate dean.		CLL 499 Independent Study: Latin	3 Credits
Prerequisite: permission of the instructor, department chair, & associate dean.		Directed research on a selected topic. Independent studies require an application and approval by the associate dean.	
		Prerequisite: permission of the instructor, department chair, & associate dean.	
		Offered: occasionally.	
LATIN - CLL			
CLL 101 Elementary Latin	3 Credits		
Intensive introduction to the grammar, syntax, and vocabulary of classical Latin. Selected readings.			
Offered: every fall.			
CLL 102 Elementary Latin II	3 Credits		
Intensive introduction to the grammar, syntax, and vocabulary of classical Latin. Selected readings.			
Prerequisite: CLL 101, or one year of high school Latin through the senior year, or permission of instructor.			
Offered: every spring.			
CLL 201 Latin Literature	3 Credits		
Selected Latin literary authors, genres, or themes.			
Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.			
CLL 204 Readings in Latin Literature	3 Credits		
Selected Latin literary authors, genres, or themes.			
Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.			
CLL 205 Latin Literature	3 Credits		
Selected Latin literary authors, genres, or themes.			
Prerequisite: CLL 102, or two years of high school Latin through the senior year, or permission of instructor.			

Communication Studies

Chair: John S. Dahlberg, PhD

INTRODUCTION

The Communication Studies major is grounded firmly in the liberal arts tradition. The Communication Studies curriculum reflects an equal interest in what is communicated within and between cultures and in how communication takes place in intrapersonal, interpersonal, organizational and mediated contexts. The department's curriculum addresses three major facets of the academic study of communication: theory, criticism and professional skills. In the Communication Studies program, students examine the dynamic nature of modern communication processes and technologies by emphasizing the theory, structure, function, value systems and effects of society's communication institutions. In practical terms, students examine how we communicate as families, couples and friends. We

study how we interact in work and corporate settings; how we persuade and are persuaded, as individuals, professionals and intended targets; and how we affect others through various media, from oral to written to electronic to digital. The program offers students a variety of opportunities to acquire professional knowledge, skills and production competencies relevant to diverse careers in many communication-related fields. Recognizing the need to prepare students for productive lives in a changing world, the department aims at educating its graduates to welcome change. In a rapidly changing and highly competitive job market, the Communication Studies faculty provides the foundation on which to build meaningful roles in the contemporary world. Students may concentrate in Media Studies, Advertising and Public Relations, and/or Interpersonal/Organizational Communication. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Communications Studies website (<https://www.canisius.edu/academics/programs/communication-studies>).

QUALIFICATIONS

Majors must have a cumulative GPA of at least 2.0, a minimum grade of C- in all communication courses, and a minimum overall average of 2.0 in all communication coursework. Performance of majors is subject to review relative to their continuation in the program. Communication Studies majors select an academic sequence within the Communication major and need at least 36 hrs. of communication courses (33 hrs. for dual majors).

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Communication Studies majors are assigned an advisor at the beginning of their freshman year. If you are a transfer into the Communication Studies major or you do not have an advisor, please contact the Communication Studies departmental office at 716-888-2115 so that an advisor can be assigned to you.

MAJOR EXPERIENCES

Internships and Independent Study

Internships ([COM 488](#), [COM 498](#)) awarding up to a maximum of 12 credit hours may be earned by qualified Communication Studies majors at approved locations in Buffalo or other cities. The internships are individually arranged, require department approval and are available only to junior or senior candidates with a cumulative GPA of at least 2.5 and a Communication average of at least 2.7. Internships are taken on a Pass/Fail basis and are counted towards free elective credit. Students are encouraged to plan early to do internships during their junior and senior years. Independent Study ([COM 499](#)) provides the opportunity for a student to work under the supervision of a faculty member to complete an academic research project culminating in a scholarly product or a production of some kind. Opportunity for independent study (three credits) is open only to junior and senior majors in good standing with consent of the instructor, chair, and associate dean. Please note that Independent Studies are granted

only in very specific circumstances. See the department chair for more information.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Dual majors with Communication Studies are available with the permission and guidance of both chairs. Students complete a minimum of 33 credit hours of communication courses. Communication Studies dual major sequences allow several different choices; among those most frequently involved are digital media arts, journalism, political science, psychology, English, history, marketing and modern languages. Each Communication Studies and dual major is assigned a department faculty advisor for the purpose of planning an individual program that will satisfy the department's requirements and the student's personal goals. Course selections develop from communication major requirements, prerequisites, recommended sequences and communication electives. Communication Studies students who are dual majors and successfully complete 3 or more credit hours in Internships or Independent Study (COM 488, COM 498 or COM 499) are required to complete 30 hours of in-class credit in order to complete the Communication Studies major (i.e., not 33 or 36 in-class hours).

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Major Required Courses

COM 201	Oral Communication	3
COM 202	Communication Theory	3
COM 203	Writing for the Public Media	3
COM 204	Interpersonal Communication	3
COM 205	Mass Communication and Society	3

COM 206	Introduction to Research Methods	3
Sequence Courses		
Two courses from Interpersonal/Organizational Communication		6
Two courses from Advertising/Public Relations Communication		6
Two courses from Media Communication		6
Total Credits		36

Sequence Courses

Interpersonal/Organizational Communication

COM 302	Small Group Communication	3
COM 304	Family Communication	3
COM 318	Organizational Communication	3
COM 319	Training and Development	3
COM 327	Gender Differences in Human Communication	3
COM 335	Communication and Personality	3
COM 337	Constructive Uses of Humor	3
COM 350	Health Communication	3
COM 354	Persuasion	3
COM 359	Communication and Sports	3

Advertising/Public Relations Communication

COM 311	Principles of Advertising	3
COM 312	Public Relations: Principles and Practices	3
COM 315	Advertising and the Creative Process	3
COM 320	Advertising Writing	3
COM 330	Public Relations Writing	3
COM 340	Media Relations	3
COM 348	Environmental Communication	3
COM 353	Advertising Account Strategies	3

Media Communication

COM 325	Media Literacy	3
COM 351	Media Ethics	3
COM 361	Introduction to TV Production	3
COM 374	Film History	3
COM 375	Film Classics	3
COM 376	Film Genres	3
COM 385	Television and Children	3
COM 479	World Cinema	3

MAJOR ELECTIVES

To be selected from available COM courses, or courses with the DMA, JRN, or FAS prefix that are designated as COM electives. Photography courses listed in Fine Arts are limited to six credits in the Communication Studies major.

Select four of the following:	12
COM 302	Small Group Communication
COM 304	Family Communication
COM 311	Principles of Advertising
COM 312	Public Relations: Principles and Practices
COM 315	Advertising and the Creative Process
COM 318	Organizational Communication
COM 319	Training and Development

COM 320	Advertising Writing
COM 325	Media Literacy
COM 327	Gender Differences in Human Communication
COM 330	Public Relations Writing
COM 335	Communication and Personality
COM 337	Constructive Uses of Humor
COM 350	Health Communication
COM 351	Media Ethics
COM 353	Advertising Account Strategies
COM 354	Persuasion
COM 359	Communication and Sports
COM 361	Introduction to TV Production
COM 374	Film History
COM 375	Film Classics
COM 376	Film Genres
COM 385	Television and Children
COM 411	Advertising Campaigns
COM 412	Public Relations Case Studies
COM 414	Issues in Integrated Marketing Communications
COM 418	Interviewing
COM 422	Public Relations Campaigns
COM 479	World Cinema
COM 488	Internship I Seminar
COM 491	Video Institute I
COM 492	Video Institute II
COM 498	Internship II Seminar
COM 499	Independent Study
DMA 201	Introduction to Digital Media
DMA 215	Digital Media Culture
DMA 216	Digital Media Law
DMA 212	2D Graphics
DMA 217	Interaction Design
DMA 310	Digital Audio/Music Production
DMA 342	Introduction to Web Design
DMA 385	Digital Filmmaking
DMA 442	Advanced Web Design
FAS 140	Introduction to Still Photography ¹
FAS 141	Digital Photography ¹
JRN 310	Journalism
JRN 311	Advanced Journalism and Investigative Reporting
JRN 322	Feature/Magazine Writing
JRN 336	Sports Journalism
JRN 369	Television Features
Total Credits	12

¹ Only 6 credits of FAS photography courses can be applied as COM elective credit.

Note: Four computer labs, HD digital video editing stations, an audio/music production studio and an HD television studio/control room are available for student use in Lyons Hall.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman	
Fall	Spring
COM 205	COM 204
Sophomore	
Fall	Spring
COM 201	COM 202
COM 206 (or COM Elective)	COM 203 (or COM Elective)
Junior	
Fall	Spring
COM 206 (or COM Elective)	COM 203 (or COM Elective)
Senior	
Fall	Spring
COM Elective	COM Elective
COM Elective	COM Elective

LEARNING GOALS & OBJECTIVES

These learning goals and objectives apply to all Communication Studies majors.

Student Learning Goal 1:

Communication Studies majors will be critical thinkers who apply communication theories and concepts in life situations.

Students will:

- **Objective 1:** Demonstrate advanced skills in analyzing research.
- **Objective 2:** Apply targeted communication theories and constructs to specific projects or situations.

Student Learning Goal 2:

Communication Studies majors will design and deliver effective messages.

Students will:

- **Objective 1:** Demonstrate an understanding of the intended audience
- **Objective 2:** Determine appropriate means of communication to reach that audience.
- **Objective 3:** Demonstrate an ability to design and deliver messages.

COMMUNICATION STUDIES MINOR

Beginning in the spring of 2015, the Communication Studies department began to offer a general Communication Studies minor. Students need to complete 18 credit hours of Communication Studies courses, based on the following requirements:

Required courses for the Communication Studies minor (18 total credits):

Foundation Courses	
Select three of the following: ¹	9
COM 201	Oral Communication
COM 202	Communication Theory
COM 203	Writing for the Public Media
COM 204	Interpersonal Communication

COM 205	Mass Communication and Society	
COM 206	Introduction to Research Methods	
Sequence Courses		
One course from Interpersonal/Organizational Communication		3
One course from Advertising/Public Relations Communication		3
One course from Media Communication		3
Total Credits		18

¹ **Note:** A section of each foundation course is offered every semester. Multiple sections of COM 201 and COM 203 are offered each semester.

Sequence Courses

Interpersonal/Organizational Communication

COM 302	Small Group Communication	3
COM 304	Family Communication	3
COM 318	Organizational Communication	3
COM 319	Training and Development	3
COM 327	Gender Differences in Human Communication	3
COM 335	Communication and Personality	3
COM 337	Constructive Uses of Humor	3
COM 350	Health Communication	3
COM 354	Persuasion	3
COM 359	Communication and Sports	3

Advertising/Public Relations Communication

COM 311	Principles of Advertising	3
COM 312	Public Relations: Principles and Practices	3
COM 315	Advertising and the Creative Process	3
COM 320	Advertising Writing	3
COM 330	Public Relations Writing	3
COM 340	Media Relations	3
COM 348	Environmental Communication	3
COM 353	Advertising Account Strategies	3

Media Communication

COM 325	Media Literacy	3
COM 351	Media Ethics	3
COM 361	Introduction to TV Production	3
COM 374	Film History	3
COM 375	Film Classics	3
COM 376	Film Genres	3
COM 385	Television and Children	3
COM 479	World Cinema	3

COM 201 Oral Communication 3 Credits

Study and practice of concepts, processes and techniques of effective verbal communication in face-to-face, small group and public-address contexts. Speeches required.

Fulfills College Core: Oral Communication

Offered: fall & spring.

COM 202 Communication Theory 3 Credits

Fundamental forms of communication theory and perspectives are explored and related to particular lines of research in interpersonal, group, organizational, public and mass mediated communication contexts.

Offered: fall & spring.

<p>COM 203 Writing for the Public Media 3 Credits Intensive writing assignments employing message-design principles provide opportunities to prepare news, features, press releases, advertising copy and opinion pieces. Fulfills College Core: Advanced Writing-Intensive Offered: fall & spring.</p>	<p>COM 319 Training and Development 3 Credits Methods for assessing training needs within organizations, and designing, implementing and assessing outcomes of training. Emphasis on principles of effective training and development of training competencies. Students develop training skills. Fulfills College Core: Oral Communication Offered: spring.</p>
<p>COM 204 Interpersonal Communication 3 Credits Examines the theoretical and pragmatic aspects of interpersonal communication in various contexts to enhance self-awareness and effective self-expression in relationships. Fulfills College Core: Field 5 (Social Sciences) Offered: fall & spring.</p>	<p>COM 320 Advertising Writing 3 Credits Covers a variety of ways of developing advertising copy (copywriting) and creative concepts for persuasive advertising pieces. Includes workshop writing for print, television and radio commercials, and social media. Offered: every other year.</p>
<p>COM 205 Mass Communication and Society 3 Credits Survey of mass communication processes and the mass media in terms of development, industry structure, functions, effects and interactive relationships with American society. Fulfills College Core: Field 5 (Social Sciences) Offered: fall & spring.</p>	<p>COM 325 Media Literacy 3 Credits Focuses on theoretical approaches and practical skills. Students learn to analyze, think critically and produce effective mediated messages through the production of a service-oriented video project. Service Learning Option. (DMA, JRN elective). Offered: every other year.</p>
<p>COM 206 Introduction to Research Methods 3 Credits The fundamentals of the scientific method, especially the basics of research methods, designs and hypothesis testing. Offered: fall & spring.</p>	<p>COM 327 Gender Differences in Human Communication 3 Credits Examines gender as a variable of interest in social interaction with special emphasis on contemporary gender theories, concepts, and research. Understand the reasons why communication misunderstandings related to gender differences occur. Offered: every other year.</p>
<p>COM 302 Small Group Communication 3 Credits Communication variables in small groups involving task, maintenance, leadership, conformity, shift-to-risk and development. Some emphasis on skill development. Offered: every other year.</p>	<p>COM 330 Public Relations Writing 3 Credits Theoretical perspectives on various forms of public relations writing and the applications of each. Writing and editing skills. Students produce portfolio of PR writing tools and techniques. (ADV/PR). Spring. Offered: spring.</p>
<p>COM 304 Family Communication 3 Credits Examines contemporary family communication theories, concepts, models and research. Special emphasis on improving family communication across the lifespan. Fulfills College Core: Field 5 (Social Sciences) Offered: every other year.</p>	<p>COM 335 Communication and Personality 3 Credits The role of personality in human communication (especially argumentative and aggressive traits). Emphasis on critical thinking and constructive arguing. Students develop arguing skills. Offered: every other year.</p>
<p>COM 311 Principles of Advertising 3 Credits The fundamentals of advertising, including history and development, advertising media, marketing, audiences, campaign objectives, budget, creativity and agency functions. (DMA elective). Offered: fall.</p>	<p>COM 337 Constructive Uses of Humor 3 Credits Survey of classic and contemporary humor theories, concepts and research. Special emphasis on research that highlights the benefits of humor in education, medicine, business and relational contexts. Offered: every other year.</p>
<p>COM 312 Public Relations: Principles and Practices 3 Credits Historical antecedents and contemporary practice of public relations are examined in the context of public relations concepts and theories. The course also examines the day-to-day responsibilities and ethical obligations of PR practitioners in a variety of public settings. (ADV/PR sequence). Offered: fall.</p>	<p>COM 340 Media Relations 3 Credits One form of public relations is communicating with audiences through the news media. This course focuses on the principles and practices of media relations. (ADV/PR sequence). Offered: every other year.</p>
<p>COM 315 Advertising and the Creative Process 3 Credits Study of techniques, tools and theories for generating innovative concepts and ideas. Emphasize application to advertising context. (DMA elective). Offered: every other year.</p>	<p>COM 348 Environmental Communication 3 Credits Writing about the environment began in earnest with Thoreau, continued with Rachel Carson and Silent Spring, and is an important issue for journalists, PR specialists, environmental scientists and ordinary citizens. This course examines issues in environmental communication from the various public roles. (ADV/PR sequence). Offered: every other year.</p>
<p>COM 318 Organizational Communication 3 Credits Communication principles and practices, including communicator style variables, communication flow and competent superior-subordinate communication. Offered: fall.</p>	

- COM 350 Health Communication** 3 Credits
Examines how communication plays a role in the health decisions people make from a variety of perspectives. Focuses on theoretical approaches to health communication, influence tactics, challenges associated with medical adherence/compliance gaining, caregiver- client communication, how personality affects health decisions, nonverbal and verbal factors in the health interaction, and social-cultural factors in health.
Fulfills College Core: Field 5 (Social Sciences)
Offered: every other year.
- COM 351 Media Ethics** 3 Credits
Explores ethics across media disciplines through the work of professional communicators -- journalists, broadcasters, advertising and public relations practitioners. Develop practices of making crucial media decisions based on principles and idealism.
Fulfills College Core: Ethics
Offered: fall.
- COM 352 Advanced Interpersonal Seminar** 3 Credits
This class examines interpersonal communication theories, concepts and models. Students learn more about how interpersonal communication research is conducted and develop an original research project on some aspect of interpersonal communication.
Offered: occasionally.
- COM 353 Advertising Account Strategies** 3 Credits
Account management is a critical component of marketing and communications. We'll cover the practical aspects of planning, client-agency relationships, functioning effectively in a creative environment, working with media outlets and start to learn how to develop an integrated marketing communications program.
Offered: occasionally.
- COM 354 Persuasion** 3 Credits
Students explore classic and contemporary persuasion theories, models and concepts. Students participate in semester long persuasion and social influence projects where they apply theories and concepts.
- COM 359 Communication and Sports** 3 Credits
Why do so many people enjoy playing, watching, and talking about sports? This course examines the significance of interpersonal communication in the context of sports. Communication interactions between coaches and athletes, athletes and teammates, coaches and parents, and parents and athletes are explored.
Offered: every other year.
- COM 361 Introduction to TV Production** 3 Credits
Studio techniques, lighting, sound recording, set design, electronic graphics and editing, production of live and edited programs in studio. (DMA elective).
Offered: every other year.
- COM 374 Film History** 3 Credits
Development of film making and cinema art from 1895 through World War II. Students study, view, and discuss classic silent and sound pictures from Hollywood and abroad. (DMA elective. Also accepted for Art History major/minor credit).
Offered: every other year.
- COM 375 Film Classics** 3 Credits
The development of cinema worldwide from World War II through the 1990s. Study, view and discuss films representative of major directors, genres and national cinema movements. (DMA elective. Also accepted for Art History major/minor credit).
Offered: every other year.
- COM 376 Film Genres** 3 Credits
Students who are interested in film professionally or personally are invited to view sequences from the finest motion pictures made in the past 100 years. The course will present an overview of the types (genres) of films, including: Action-Adventure, Animation, Avant-Garde, Biopic, Children's Comedy, Crime, Cult Movies, Documentary, Drama, Film Noir Historical, Horror, Melodrama, Musical, Mystery, Romance, Science Fiction and Fantasy, Serials, War, and the Western.
Offered: every other year.
- COM 385 Television and Children** 3 Credits
Learn about the role of television in children's lives. Course explores children's television use, the development and content of children's television programs (both commercial and educational), television and the family, and children's advertising.
Offered: occasionally.
- COM 408 Seminar: Special Topics and Not-for-Profit Organizations** 3 Credits
The seminar experience concentrates on current issues and trends in not-for-profit organizations. Topics will vary to meet the changing challenges and opportunities not-for-profit organizations face in light of political climate changes and the evolution of public policy. Topics may include community building, the role of a board of directors, women's issues, aging, public policy, and globalization. The seminar will incorporate discussion of relevant theory and topical issues leading to independent research related to the selected topic(s).
Offered: spring of odd-numbered years.
- COM 411 Advertising Campaigns** 3 Credits
Designed as a capstone course for advertising students, this course examines current and classic advertising campaigns for technique and effectiveness. Students will also develop their own advertising campaigns.
Prerequisite: COM 311 or permission of instructor.
Offered: every other year.
- COM 412 Public Relations Case Studies** 3 Credits
Students will become familiar with a process for public relations problem-solving through analysis of a variety of PR case studies in major areas of the field, including employee relations, consumer relations, media relations and crisis communications. (ADV/PR sequence).
Offered: every other year.
- COM 414 Issues in Integrated Marketing Communications** 3 Credits
In this Core Capstone seminar, students explore a range of contemporary issues in advertising, public relations and marketing communications (IMC). They include: consumerism, social effects, privacy and social media, sexual and minority portrayals, political communication, messaging, and more. These are viewed against ethical, justice, global and diversity attributes. Recommend COM/ADV, COM/PR or MKT background.
Restriction: senior standing.
Fulfills College Core: Core Capstone
Offered: fall & spring.
- COM 415 Partnerships and the Not-for-Profit Organization** 3 Credits
Growing and strengthening our non-profit organizations through partnerships is one of the most important strategies available to organizational leaders today. Say the word 'collaboration' and everyone knows it is code for innovation, inspiration, new funding sources and a great deal of hard work. In this course, we will blend practice and theory to gain a deeper understanding and mastery of the process of collaboration. During our time together, we will use the power of our own partnership success stories and lessons learned in order to weave together key content areas of communication, collaboration and leadership in the non-profit.
Offered: spring of even-numbered years.

COM 416 Fund Raising and Development at Not-for-Profit Organizations 3 Credits

This course will introduce students to the principles and practices of fundraising and long-term development planning in the not-for-profit organization. Blended into each topic area is the professional code of ethics, advocacy and role and responsibilities. The course combines theory and practice by using case studies, in-class small group exercises, case writing, role plays and experience sharing.

Offered: every fall.

COM 418 Interviewing 3 Credits

Examines the underlying principles of interviewing in professional, business, and research settings and research providing validation of these principles. Students develop skills in interviewing through class projects and in-class exercises. Students develop the ability to probe well, to avoid making unwarranted assumptions, and, accurately, to record information during interviews.

Offered: every other year.

COM 422 Public Relations Campaigns 3 Credits

Designed as a capstone course for public relations students, this course examines PR campaigns as the concerted efforts of an organization to build socially responsible relationships by achieving research-based goals through the application of communication strategies and the measurement of outcomes. Students produce an actual campaign.

Prerequisite: COM 312 or permission of instructor.

Offered: every other year.

COM 479 World Cinema 3 Credits

Award-winning and critically acclaimed films from different countries and cultures are studied through weekly screenings and written logs. By examining cinema practices beyond Hollywood, student experience alternative ways of using the universal language of cinema to tell stories and express the human condition from other national and artistic perspectives. Also accepted for Art History major/minor credit.

Offered: every other year.

COM 488 Internship I Seminar 3-9 Credits

Student experientially learns communication functions in compatibly matched professional setting, locally or out-of-town. Faculty and on-site supervision. Seminar required. Pass/fail. May be repeated as COM 498; 12-credit limit for COM 488 and COM 498 combined. Information about the internship application process is available on the Communication Studies Department website.

Prerequisite: junior or senior standing, minimum overall GPA of 2.50, minimum communication studies average of 2.70, & approval by department faculty. **Restriction:** must be COM major.

Offered: every semester.

COM 491 Video Institute I 3 Credits

Students are immersed in the development and creation of original video/film projects, which may take the form of a service-oriented video for a non-profit organization or a social documentary. May be repeated as COM 492.

Offered: every other year.

COM 492 Video Institute II 3 Credits

Sequel to COM 491. Students are immersed in the development and creation of original video/film projects, which may take the form of a service-oriented video for a non-profit organization or a social documentary.

Offered: every other year.

COM 498 Internship II Seminar 3-9 Credits

Sequel to COM 488 for students taking multiple internships. Each student is limited to a combined total of 12 credit hours for COM 488 and COM 498.

Prerequisite: junior or senior standing, minimum overall GPA of 2.50, minimum communication studies average of 2.70, & approval by department faculty. **Restriction:** must be COM major.

Offered: every semester.

COM 499 Independent Study 3 Credits

Student conducts original project or self-designed course of study under the tutelage of Communication Studies faculty member. Offered only in very specific circumstances. Independent studies require an application and approval by the associate dean.

Prerequisite: junior or senior standing; & permission of instructor, chair, & associate dean. **Restriction:** must be COM major.

Computer Science

Chair: Jeffrey J. McConnell, PhD

INTRODUCTION

A degree in computer science from Canisius College provides you with the experience and background required to continue with graduate school or to find employment in a variety of fields. Our graduates enjoy challenging and lucrative careers all over the country in many types of companies, from banking to the defense industry, from web startups to major corporations. The computer science major provides you with an essential theoretical background along with practical programming experience and knowledge about many of the important and cutting edge areas of computer science, including artificial intelligence, web development, software engineering, databases, operating systems, and distributed computing.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Computer Science website (<https://www.canisius.edu/academics/programs/computer-science>).

QUALIFICATIONS

Students must maintain a 2.0 GPA in the major and a 2.0 overall average to graduate with a degree in Computer Science.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete

the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

In the past, Computer Science majors have had dual majors in many other areas, including Physics (p. 202), Mathematics (p. 175), Digital Media Arts (p. 126), Religious Studies (p. 218), English (p. 131), and Classics (p. 109).

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

CSC 111 & 111L	Introduction to Programming and Introduction to Programming Laboratory	4
CSC 112 & 112L	Data Structures and Data Structures Laboratory	4
CSC 213 & 213L	Large Scale Programming and Large Scale Programming Laboratory	4
CSC 253 & 253L	Computer Hardware and Computer Hardware Laboratory	4
CSC 281	Automata and Algorithms	3
CSC 310 & 310L	Information Organization and Processing and Information Organization and Processing Laboratory	4
CSC 320	The Social Impact of Computing	3
CSC 330 & 330L	Distributed Computing and Distributed Computing Laboratory	4
CSC 351 & 351L	Comparative Programming Languages and Comparative Programming Languages Laboratory	4
CSC 360 & 360L	Intelligent Systems and Intelligent Systems Laboratory	4
CSC 395 & 395L	Software Engineering and Software Engineering Lab	4
Total Credits		42

MAJOR ELECTIVE

One additional course at the 300/400 level is required. These courses cover a variety of topics including web programming, advanced object

oriented programming and design patterns, cryptography, app development, graphics, numerical analysis and bioinformatics. All these courses are either 3 or 4 credits. Faculty teach these courses on a rotating basis. To determine what is offered each semester consult the class schedule.

Recent electives include:

CSC 380 & 380L	Web Development and Web Development Laboratory	4
CSC 400 & 400L	Special Topics in Computing and Special Topics in Computing Laboratory	4
MAT 341	Numerical Analysis	3

REQUIRED MATHEMATICS COURSES

MAT 111	Calculus I	4
MAT 191 or MAT 230	Introduction to Discrete Mathematics Logic, Set Theory, and Proofs	4

TRACKS

Students must complete one of the following two tracks:

Interdisciplinary Track

Completion of an approved minor in another department or program

Science Track

MAT 112	Calculus II	4
Select two of the following options:		8
Option 1:		
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	
Option 2:		
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	
Option 3:		
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	
Select one of the following:		3-4
MAT 141	Inferential Statistics and Computers for Science	
MAT 219	Linear Algebra	
MAT 351	Probability & Statistics I	
Total Credits		15-16

Many courses at the 200-level and above are offered every two years on a rotating schedule. Thus, some students will take, for example, CSC 330 in their junior year, while the students who entered the previous year will take CSC 330 in their senior year.

The CSC department maintains a lab for use by majors and minors that contains a number of computers that provide access to departmental and college-wide software along with a printer.

CSC majors often get part-time jobs or paid internships in the Western New York region while still taking classes, though we do not formally require an internship. CSC 497 "Internship" is a way to earn credit for an internship, but the experience must include a significant learning component that does not overlap with required coursework and must be pre-approved by the department chair. The Internship cannot count as the CSC elective.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
CSC 111 & 111L	CSC 112 & 112L
MAT 111 or 109	Track course MAT 110 (if needed)

Sophomore

Fall	Spring
CSC 213 & 213L	MAT 191
Select one of the following:	Select one of the following:
CSC 253 & 253L	CSC 253 & 253L
CSC 281	CSC 281
Track course	Track course

Junior

Fall	Spring
CSC Elective (take 1 elective in junior or senior year)	CSC 310 & 310L
Track course	CSC 330 & 330L

Senior

Fall	Spring
CSC 360 & 360L	CSC 320
Track course, if needed	CSC 351 & 351L CSC 395 & 395L

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Majors will develop a computational solution to a problem.

Students will:

- Objective A: Translate a problem description to a formal representation;
- Objective B: Implement, justify and test acceptable computational solutions;
- Objective C: Perform programming logic.

Student Learning Goal 2

Majors will know the foundations of computing.

Students will:

- Objective A: Identify computational power and its limits;
- Objective B: Describe the operational details of computer systems;
- Objective C: Describe the operational details of programming languages.

Student Learning Goal 3

Majors will understand the social impact of computing.

Students will:

- Objective A: Describe the social impact of computing.

Two Minors are offered

- Computer Science Minor (p. 123)
- Computer Theory Minor (p. 123)

CSC 108 Introduction to Web Computing 3 Credits

Introduction to computer science through web sites, web pages, web page programming, HTML, XML, CSS and JavaScript. The history and social impact of computers, networks and the World Wide Web are included in the course.

Corequisite: CSC 108L.

Fulfills College Core: Ethics, Field 7 (Mathematical Sciences)

Offered: fall & spring.

CSC 108L Introduction to Web Computing Laboratory 1 Credit

Required lab for CSC 108.

Corequisite: CSC 108.

CSC 109 Robotics Introduction to Computer Science 3 Credits

Introduction to computer science through robotics, the basics of artificial intelligence and the fundamental ideas of logic, algorithms, computer systems and programming. Includes ethical issues in robotics.

Corequisite: CSC 109L.

Fulfills College Core: Field 7 (Mathematical Sciences)

CSC 109L Robotics Introduction to Computer Science Laboratory 1 Credit

Required lab for CSC 109.

Corequisite: CSC 109.

Fulfills College Core: Ethics, Field 7 (Mathematical Sciences)

CSC 111 Introduction to Programming 3 Credits

Algorithms, programming, computers, and applications to problem solving in Python.

Corequisite: CSC 111L.

Fulfills College Core: Field 7 (Mathematical Sciences)

Offered: fall.

CSC 111L Introduction to Programming Laboratory 1 Credit

Required lab for CSC 111.

Corequisite: CSC 111.

CSC 112 Data Structures 3 Credits

Basic concepts of object-oriented programming, recursion, and data structures, including lists, stacks, queues, and trees using Python.

Prerequisite: minimum grade of C in CSC 111 & CSC 111L. **Corequisite:** CSC 112L.

Offered: spring.

CSC 112L Data Structures Laboratory 1 Credit

Required lab for CSC 112.

Prerequisite: minimum grade of C in CSC 111 & CSC 111L. **Corequisite:** CSC 112.

<p>CSC 127 Introduction to Game Design 3 Credits Computer game development and underlying computer concepts necessary for game design. Game components related to the player, stories, characters, game play, graphics, the interface and audio. Corequisite: CSC 127L. Fulfills College Core: Field 7 (Mathematical Sciences), Oral Communication Offered: fall 2015.</p>	<p>CSC 330 Distributed Computing 3 Credits The design of operating system software, distributed applications, client/server and other models, security issues, and parallel programming on a High Performance Computing Cluster. Prerequisite: CSC 253, CSC 253L, & minimum grade of C in CSC 112 & CSC 112L. Corequisite: CSC 330L. Offered: 2017-2018.</p>
<p>CSC 127L Intro to Game Design Laboratory 1 Credit Required lab for CSC 127. Corequisite: CSC 127.</p>	<p>CSC 330L Distributed Computing Laboratory 1 Credit Required lab for CSC 330. Corequisite: CSC 330.</p>
<p>CSC 213 Large Scale Programming 3 Credits Introduction to the design, implementation, and testing of larger software systems. Intensive instruction in Java including graphics and object-oriented design. Prerequisite: minimum grade of C in CSC 112 & CSC 112L. Corequisite: CSC 213L. Offered: once a year.</p>	<p>CSC 351 Comparative Programming Languages 3 Credits A study of programming languages and their implementations. Programming in logical and functional programming languages is included. Prerequisite: minimum grade of C in CSC 112 & CSC 112L. Corequisite: CSC 351L. Offered: spring 2017.</p>
<p>CSC 213L Large Scale Programming Laboratory 1 Credit Required lab for CSC 213. Corequisite: CSC 213.</p>	<p>CSC 351L Comparative Programming Languages Laboratory 1 Credit Required lab for CSC 351 Comparative Programming Languages. Corequisite: CSC 351.</p>
<p>CSC 253 Computer Hardware 3 Credits Introduction to digital logic, Boolean algebra, hardware and computer organization. Overview of current architectures. Prerequisite: minimum grade of C in CSC 111 & CSC 111L. Corequisite: CSC 253L. Offered: once a year.</p>	<p>CSC 360 Intelligent Systems 3 Credits An introduction to intelligent systems including logic and rule-based systems, machine learning, and applications of AI. Prerequisite: minimum grade of C in CSC 112 & CSC 112L. Corequisite: CSC 360L. Offered: fall 2016.</p>
<p>CSC 253L Computer Hardware Laboratory 1 Credit Required lab for CSC 253. Corequisite: CSC 253.</p>	<p>CSC 360L Intelligent Systems Laboratory 1 Credit Required lab for CSC 360. Corequisite: CSC 360.</p>
<p>CSC 281 Automata and Algorithms 3 Credits Formal language theory including finite and pushdown automata, grammars, Turing Machines and the Halting Problem. Provides an introduction to the design and analysis of algorithms, including classes of problems and methods for analysis. Prerequisite: minimum grade of C in CSC 112 & CSC 112L. Offered: once a year.</p>	<p>CSC 380 Web Development 3 Credits Web design principles, programming and scripting (both client-side and server-side), client/server mechanisms, search engines, and security. Prerequisite: minimum grade of C in CSC 111 & CSC 111L and junior or senior standing. Corequisite: CSC 380L. Offered: fall 2016.</p>
<p>CSC 310 Information Organization and Processing 3 Credits Databases, high-level organization and processing of information, SQL, and modern NOSQL systems. Prerequisite: minimum grade of C in CSC 112 & CSC 112L. Corequisite: CSC 310L. Offered: 2017-2018.</p>	<p>CSC 380L Web Development Laboratory 1 Credit Required lab for CSC 380. Corequisite: CSC 380.</p>
<p>CSC 310L Information Organization and Processing Laboratory 1 Credit Required lab for CSC 310. Corequisite: CSC 310.</p>	<p>CSC 391 Computer Science Junior Seminar 1 Credit Topic-focused exploration involving students and faculty. Prerequisite: permission of instructor.</p>
<p>CSC 320 The Social Impact of Computing 3 Credits Examines the societal issues involved in computing such as accessibility, ethical issues, privacy, censorship, social media, and professional responsibilities. Includes applications of information literacy techniques to the major. Prerequisite: minimum grade of C in CSC 112 & CSC 112L. Corequisite: CSC 320L. Fulfills College Core: Core Capstone Offered: spring.</p>	<p>CSC 395 Software Engineering 3 Credits An examination of a variety of techniques and concepts that have been created to improve the software production process. Includes discussions of software processes, Agile software development, requirements engineering, testing, and software evolution. Prerequisite: CSC 213 & CSC 213L. Corequisite: CSC 395L. Fulfills College Core: Oral Communication Offered: fall 2016.</p>
<p>CSC 395L Software Engineering Lab 1 Credit Required lab for CSC 395. Corequisite: CSC 395.</p>	<p>CSC 400 Special Topics in Computing 3 Credits Current topics of interest to faculty and students. Possible topics: cryptography, advanced scripting languages, networking, etc. Prerequisite: permission of instructor. Corequisite: CSC 400L.</p>
<p>CSC 400L Special Topics in Computing Laboratory 1 Credit Required weekly lab for CSC 400.</p>	<p>CSC 400L Special Topics in Computing Laboratory 1 Credit Required weekly lab for CSC 400.</p>

CSC 491 Computer Science Senior Seminar 1 Credit
 Topic-focused exploration involving students and faculty.
Prerequisite: permission of instructor.

CSC 497 Internship 1-3 Credits
 Special projects for local institutions/businesses. Must be related to a specific focused task and involve a significant learning component. Internships require an application and approval by the associate dean. Credit is not given simply for a part-time job. Approved project proposal and results documentation required. Does not count as a CSC elective.
Prerequisite: permission of chair & associate dean.

CSC 498 Independent Project 3 Credits
 A directed project course that includes research, design, and implementation of a software system.
Prerequisite: permission of instructor.

CSC 499 Independent Study 1-4 Credits
 An in-depth study of a specific computing topic. Independent studies require an application and approval by associate dean.
Prerequisite: junior or senior standing; & permission of instructor, chair, & associate dean.

Computer Science Minor

CSC 111 & 111L	Introduction to Programming and Introduction to Programming Laboratory	4
CSC 112 & 112L	Data Structures and Data Structures Laboratory	4
CSC 213 & 213L	Large Scale Programming and Large Scale Programming Laboratory	4
One course at the 300 or 400 level, chosen after consulting with an advisor		3-4
One additional Computer Science course		3-4
Total Credits		18-20

Computer Theory Minor

CSC 111 & 111L	Introduction to Programming and Introduction to Programming Laboratory	4
CSC 112 & 112L	Data Structures and Data Structures Laboratory	4
CSC 281	Automata and Algorithms	3
MAT 191	Introduction to Discrete Mathematics	4
One additional Computer Science course		3-4
Total Credits		18-19

Criminal Justice

INTRODUCTION

Criminal justice is the study of criminal law, criminal procedure, and the enforcement of criminal law. It includes understanding the social context of criminal behavior and the way society upholds social control and sanctions those who violate the criminal law. The major is grounded in a liberal arts curriculum; it emphasizes not only how the criminal justice system has developed in its present form, but also how changes in the system affect other parts of society. The major prepares students for a broad spectrum of occupations, including law enforcement, corrections, and allied mental health. Finally, students who wish to pursue careers as lawyers can major in criminal justice and also take advantage of the college's Pre-Law program. For a more detailed description of the program, faculty, facilities, academic

and co-curricular opportunities please go to the Criminal Justice website (<https://www.canisius.edu/academics/programs/criminal-justice>).

QUALIFICATIONS

Students must have a minimum grade of C in all required courses and maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Criminal Justice.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Students should consult with Dr. Patricia Erickson, Director of Criminal Justice, for current advisement information.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Many of the department's majors combine criminal justice with a second major in another discipline, such as sociology, psychology, political science, history, modern languages or communication studies.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Required Courses

MAT 131	Statistics for Social Sciences	3
SOC 110	Introduction to Sociology	3
SOC 342	Social Research Methods	3
or ANT 351	Qualitative Research Methods	
CRJ 227	Criminal Justice I	3
CRJ 228	Criminal Justice II	3
CRJ 320	Criminology	3
CRJ 382	Criminal Justice Ethics	3
CRJ 449	Criminal Law	3
CRJ 450	Criminal Procedure	3
CRJ 461	Criminal Justice Capstone	1

Criminal Justice Electives

Select three of the following:		9
CRJ 280	Language for Legal Professions	
CRJ 300	Special Topics in Criminal Justice	
CRJ 330	Current Issues in Forensic Psychology	
CRJ 337	Violence and the Family	
CRJ 344	Violent Crime in American	
CRJ 345	Gangs in American Society	
CRJ 351	Police and the Community	
CRJ 354	Juvenile Delinquency	
CRJ 356	Treatment of Offenders	
CRJ 357	Alternatives to Incarceration	
CRJ 358	White Collar Crime	
CRJ 359	Women and Crime	
CRJ 498	Criminal Justice Internship	
CRJ 499	Independent Study	

Total Credits 37

The following courses offered by other departments or programs count as electives for the criminal justice major and minor:

ANT 310	Codebreaking	3
ANT 333	Forensic Anthropology	3
ISB 460	Computer Forensics	3
PSC 103	The American Constitution	3
PSC 320	American Constitutional Law I	3
PSC 321	American Constitutional Law II	3
PSC 345	Transnational Crime After 9/11	3
PSC 420	The Constitution, The War on Terror and Civil Liberties	3

The following psychology courses will count as electives for dual psychology/criminal justice majors:

PSY 303	Abnormal Psychology	3
PSY 360	Psychology and Law	3

Dual psychology/criminal justice majors may satisfy the statistics and methods requirements with the following courses:

PSY 201	Basic Statistics for Behavioral Sciences	3
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PSY 202	Research Methods in Psychology	3
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INTERNSHIPS

Many internship opportunities upon approval are available to qualified juniors and seniors. As an urban center situated on the Niagara Frontier, Buffalo offers numerous internship experiences where students can explore careers and get valuable real life experience. A GPA of 3.0 or higher is required.

FOREIGN LANGUAGE AND STUDY ABROAD

The department encourages criminal justice majors to study a foreign language of their choice and to participate in the college study abroad program.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
SOC 110	MAT 131

Sophomore

Fall	Spring
CRJ 227	CRJ 228
CRJ elective	CRJ elective

Junior

Fall	Spring
CRJ 382	CRJ 320
SOC 342 or ANT 351	CRJ elective

Senior

Fall	Spring
CRJ 449	CRJ 450
	CRJ 461

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Criminal Justice majors will be able to demonstrate that they are able to think critically about crime and criminal justice.

Students will:

- **Objective A:** Critically evaluate theories about crime and criminal behavior;
- **Objective B:** Critically evaluate laws and court decisions about crime and criminal behavior.

Student Learning Goal 2

Criminal Justice majors will be able to demonstrate that they have the knowledge and skills necessary for careers in criminal justice.

Students will:

- **Objective A:** Explain the organization and administration of the criminal justice system;
- **Objective B:** Explain the role of the social science research in criminal justice.

Student Learning Goal 3

Criminal Justice majors will be able to demonstrate the importance of ethics in criminal justice.

Students will:

- **Objective A:** Analyze how personal values may conflict with the ethical standards for criminal justice professionals;
- **Objective B:** Analyze how ethical principles and ethical codes of conduct apply to criminal justice professionals.

Two minors are housed in Criminal Justice:

- Criminal Justice Minor (p. 126)
- Inter-Disciplinary Minor in Computer Forensics (p. 126) (co-administered with the Marketing Program)

CRJ 227 Criminal Justice I 3 Credits

Focuses on the nature and extent of crime, policing, and court system including constitutional rights and trial process.

Fulfills College Core: Field 5 (Social Sciences)

Offered: fall.

CRJ 228 Criminal Justice II 3 Credits

Examines sentencing, corrections, juvenile court, drug court, and global crime issues.

Offered: spring.

CRJ 280 Language for Legal Professions 3 Credits

Explores the use of language in the administration of law, including ways to read and brief cases and to read statutes.

Fulfills College Core: Justice, Oral Communication

Offered: spring.

CRJ 300 Special Topics in Criminal Justice 3 Credits

Critical examination of a selected topic in criminal justice. Subject matter determined by the instructor.

CRJ 320 Criminology 3 Credits

Classical and contemporary theories of criminal behavior and the role of theory in the criminal justice system. Explanations for why crime occurs, understanding of criminal behavior and its impact on society.

Prerequisites: CRJ 227 and CRJ 228.

Fulfills College Core: Advanced Writing-Intensive, Justice

Offered: fall and spring.

CRJ 330 Current Issues in Forensic Psychology 3 Credits

Application of the science of psychology to questions and issues relating to criminal law and the criminal justice system. Topics discussed include competency to stand trial, assessment of mental state for an insanity plea, and prediction of violence and assessment of risk.

Offered: spring.

CRJ 337 Violence and the Family 3 Credits

How family dynamics can contain elements that give rise to violence, including 'battered women' and abused children.

Offered: fall & spring.

CRJ 344 Violent Crime in American 3 Credits

Examination into the theories that cause violent crime and behavior. Analysis into the factors attributed to violence - mental illness, racism, poverty, and interpersonal relationships.

CRJ 345 Gangs in American Society 3 Credits

Examines the theoretical causes for the growth of gangs; including youth and criminal gangs. Topics include the social theories, measurement, and solutions.

CRJ 351 Police and the Community 3 Credits

Critical examination of the operation of all levels of law enforcement in America. Topics include the selection process, training, ethics, and police accountability.

CRJ 354 Juvenile Delinquency 3 Credits

Legal processes in juvenile delinquency as well as understanding and analysis of current practices and historic and contemporary issues. Suggested programs for rehabilitation and prevention of delinquency.

CRJ 356 Treatment of Offenders 3 Credits

Correction theory, offender typologies, and nature and diagnosis of offenders and future trends in dealing with criminal offenders.

CRJ 357 Alternatives to Incarceration 3 Credits

Examines the most effective choices to safely punish or treat the offender in the community. Topics include use of intermediate sanctions, such as community service, as an alternative to incarceration.

CRJ 358 White Collar Crime 3 Credits

Crimes committed by 'respectable people' in positions of responsibility in private or public sector. Nature of these crimes, how regulatory bodies and legal systems treat these criminals and how they seek to avoid detection and prosecution.

CRJ 359 Women and Crime 3 Credits

Classical and contemporary accounts of the etiology of female crime, patterns of female criminal behavior, and the role and treatment of women in the criminal justice system.

CRJ 382 Criminal Justice Ethics 3 Credits

The personal, social and criminal justice contexts for understanding justice, crime and ethics. Skills necessary to deal effectively with ethical issues in criminal justice systems. Problems and case studies for active exploration of social issues.

Prerequisite: CRJ 227 and CRJ 228.

Fulfills College Core: Ethics

Offered: fall.

CRJ 449 Criminal Law 3 Credits

The substantive criminal law, including offences against persons, property and public morality with emphasis on New York State Penal Law. Criminal responsibility and defenses.

Prerequisite: CRJ 227 & CRJ 228.

Offered: fall.

CRJ 450 Criminal Procedure 3 Credits

Key Supreme Court decisions on search and seizure, arrest, interrogation and identification of criminal suspects. Sentencing and punishment, appeal and post-conviction relief.

Prerequisite: CRJ 227, CRJ 228, & CRJ 449.

Offered: spring.

CRJ 461 Criminal Justice Capstone 1 Credit

Integrating experience for majors; focus is on demonstrating proficiency in the discipline and preparation for post-graduate studies or employment. Required for class of 2017 and beyond.

Offered: spring.

CRJ 498 Criminal Justice Internship 3-15 Credits

Opportunity for selected students to participate in daily work of law enforcement agencies, courts, law firms, and social service agencies. Students must apply the semester before they take the internship.

Prerequisite: minimum GPA of 3.0, junior or senior status, & signature of major advisor.

Offered: fall & spring.

CRJ 499 Independent Study 3 Credits

Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

Offered: fall & spring.

Criminal Justice Minor

The Criminal Justice minor is designed for students who have chosen another academic major (e.g. Psychology, Political Science) but who may have an academic and/or career interest in the area of criminal justice. Five courses are required. The two CRJ electives can be chosen from any of the criminal justice offerings, with at least one course at the 300 or 400 level.

The following courses are required for the Criminal Justice minor:

SOC 110	Introduction to Sociology	3
CRJ 227	Criminal Justice I	3
CRJ 228	Criminal Justice II	3
CRJ electives (2 courses)		6
Total Credits		15

Inter-Disciplinary Minor in Computer Forensics

Note: The computer forensics minor is not currently accepting new students. We will however, continue to offer appropriate courses to students who have already begun the program.

Computer forensics is the science of acquiring, preserving, retrieving and presenting data that has been processed electronically and stored on various types of electronic media including, E-mail and instant message (IM), cellular phones and digital cameras, tablet computers, GPS devices and the Internet.

Computer forensics is appropriate for students interested in a career in information security, criminal justice, forensic accounting, law enforcement, or federal investigations—as well as computer forensics investigations for defense and plaintiff lawyers.

This is a multi-disciplinary minor designed for students who have chosen any academic major in either the School of Arts & Sciences or School of Business, but who may have an academic or career interest in computer forensics.

REQUIRED COURSES

CRJ 227	Criminal Justice I	3
CRJ 228	Criminal Justice II	3
ISB 350	Networking & Security	3
ISB 460	Computer Forensics	3
ISB 470	Cyber Security	3
An ethics course:		3
CRJ 382	Criminal Justice Ethics	
or MGT 370	Managerial Environment	
Total Credits		18

Digital Media Arts

Director: Przemyslaw J. Moskal, PhD

INTRODUCTION

The Digital Media Arts (DMA) program, offered through the Communication Studies Department, focuses on converging fields of digital design, animation, video and interactive media. DMA majors take a core set of courses and choose one or more concentrations to specialize in web design, graphic design, digital filmmaking and game design. Students often complete dual majors and minors that combine important cross-functional skill sets, including Communication Studies, Business/Marketing, Computer Science, Fine Arts and others. For more information, please go to the DMA website (<https://www.canisius.edu/academics/programs/digital-media-arts>).

QUALIFICATIONS

Digital Media Arts majors must have a cumulative GPA of at least 2.00, including a minimum grade of C- in all digital media arts courses. It is expected that students in the program must have a GPA much higher than 2.0 to continue as a DMA major and all majors are subject to review relative to their continuation in the program. Transfer students and students changing their major to DMA should meet with the program director to develop an appropriate course of action based on transferred courses, previous coursework and student's interests.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Digital Media Arts majors are assigned a Communication Studies Department faculty adviser in the fall of their freshman year.

A UNIQUE LEARNING ENVIRONMENT

State-of-the-art facilities provide a 100% hands-on approach to learning. Students learn how to use cutting-edge software, including Adobe Creative Cloud, Final Cut Pro, Ableton Live, Maya, Mudbox, Unity game engine and a wide range of web development tools, including WordPress content management and blogging software — all running at with the most up-to-date versions available. Our HD (high definition) video equipment, green screen and media center allow student to create professional grade films and TV programs.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete

the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

IMPORTANT: Students should carefully examine the rules for dual majors in the department handbook (available in the department office).

LEARN OUTSIDE THE CLASSROOM

Students in the DMA program have numerous opportunities to engage in theoretical and applied research with faculty and third-party institutions. Our faculty is highly engaged in local community of designers, artists, developers and filmmakers, and as a result our students can take advantage of opportunities to learn and practice real-world skills and collaborate with professionals in their area of interest. Some of these opportunities include: Canisius College Video Institute, WordCamp Buffalo, Buffalo Game Space, DMA Student Club, Fusion Gaming Society, Communication Studies Internship Program, Canisius Earning Excellence Program, among others. For more information, please visit our Extended Learning Opportunities page (<https://www.canisius.edu/academics/programs/digital-media-arts/digital-media-arts-extended-learning-opportunities>).

INTERNSHIPS

DMA students are encouraged to participate in at least one internship within their area of interest. All internships require prior approval and are available to juniors and seniors who meet the criteria. Internships are a culminating opportunity to apply the theory and skills developed in the classroom, in a real-world setting. Some examples of companies where Canisius students have interned are: WGR-55, Snyacor Inc., Moog Inc., Moore Wallace, Perfect Parallel, Chameleon Communications, Eastco Multimedia Solutions, Buffalo Science Museum, Daily Post, Buffalo Spree magazine, Traffic East Magazine, The Martin Group, Computers for Children Inc., among others.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

The Digital Media Arts degree in the Communication Studies Department focuses on design for web and print, video production/post-production, 3D modeling, animation, interaction and game design in a 13-course, 39-credit major. The program is organized into 4 concentrations to help students choose DMA elective courses that are most relevant to their area of study. These concentrations are: graphic design, web design, digital filmmaking

and game design. State-of-the-art facilities are featured at the Digital Media Arts' home in Lyons Hall. For more information, please visit the courses and curriculum section of the DMA website (<http://www.canisius.edu/dma/courses>).

DMA 201	Introduction to Digital Media	3
DMA 212	2D Graphics	3
DMA 213	3D Graphics	3
DMA 214	Digital Design Concepts	3
DMA 215	Digital Media Culture	3
DMA 216	Digital Media Law	3
DMA 217	Interaction Design	3
DMA 218	Motion Graphics	3
Total Credits		24

SENIOR PROJECT AND PORTFOLIO REQUIREMENT

Digital Media Arts majors are required to complete a Senior Project and Portfolio course before graduating from the program. Students register for the course with a professor's approval based on their progress in the major and chosen concentration. The following DMA electives fulfill this requirement for each of the concentrations:

Graphic Design		
DMA 363	Print Design	3
DMA 393	Advertising Design	3
Web Design		
DMA 370	Designing for Mobile Devices	3
DMA 442	Advanced Web Design	3
Digital Filmmaking		
DMA 399	Social Documentary (qualifies as Core Capstone)	3
Game Design		
DMA 450	Serious Games	3
DMA 354	Game Development	3

DMA ELECTIVE COURSES BY CONCENTRATION

In addition to DMA major requirements, students complete 5 courses in a given concentration, one of which fulfills Senior Project and Portfolio requirement. A number of courses from other programs such as Fine Arts Studio (FAS) or Communication Studies (COM) or Computer Science (CSC) count as DMA electives, however, at least 3 out of 5 electives have to have a DMA prefix (e.g. DMA 395 - Digital Illustration)

Graphic Design

Graphic design is an integral component of communication studies and digital media arts. It's how we present what we're trying to say. Talented and skilled graphic designers are in demand in a wide range of areas, including advertising/marketing industries, education institutions, athletics departments, corporations, and non-profits. As a student in this concentration, you will complete projects focusing on typography, color theory, layout, and illustration in a wide-ranging field of applications and formats. You'll become an expert in creativity-focused software such as Adobe Photoshop and Adobe Illustrator. You'll learn to be a creative problem solver, designing unique, engaging and visually dynamic solutions to complex problems. And you'll build a stunning portfolio that proves it.

For more information about Graphic Design concentration, please e-mail Professor Ben Dunkle (dunkleb@canisius.edu).

Graphic Design Courses

DMA Courses

DMA 363	Print Design	3
DMA 384	Typography	3
DMA 395	Digital Illustration	3
DMA 393	Advertising Design	3

Qualified Non-DMA Courses

COM 311	Principles of Advertising	3
COM 315	Advertising and the Creative Process	3
FAS 110	Two-Dimensional Design	3
FAS 130	Three-Dimensional Design	3
FAS 120	Drawing I	3
FAS 140	Introduction to Still Photography	3
FAS 150	Color	3
FAS 170	Studio Painting I	3
PHI 291	Philosophy of Art	3

Web Design

The web design concentration will equip students with the skills and understanding needed to succeed in a constantly evolving field. Fluency in front-end technologies such as HTML, CSS, JavaScript are supplemented with core design skills. Advanced topics include WordPress, PHP, MySQL, e-commerce, social media and server management. Graduates can expect to meet the growing industry demand for web designers with a degree, portfolio and resume uniquely positioned to help them succeed.

For more information about Web Design concentration, please e-mail Professor Ben Dunkle (dunkleb@canisius.edu).

Web Design Courses

DMA Courses

DMA 342	Introduction to Web Design	3
DMA 370	Designing for Mobile Devices	3
DMA 442	Advanced Web Design	3

Qualified Non-DMA Courses

CSC 108	Introduction to Web Computing	3
CSC 111	Introduction to Programming	3
CSC 380	Web Development	3
FAS 141	Digital Photography	3
ISB 455	ECommerce	3
ISB 470	Cyber Security	3

Digital Filmmaking

Advances in SRL, GoPro and 4K digital cinema cameras have brought filmmaking workflows to the computer lab. Digital Media Arts majors combine production skills of working with cameras, lighting, broadcast and audio equipment through the Digital Filmmaking Concentration. DMA filmmaking alums work as professional Independent Filmmakers, Commercial Video Producers, Editors, Motion Graphics and Special Effects Artists.

For more information about Digital Filmmaking concentration, please e-mail Professor Jamie O'Neil (oneilj@canisius.edu).

Digital Filmmaking Courses

DMA Courses

DMA 385	Digital Filmmaking	3
DMA 387	Commercial Filmmaking & Video	3
DMA 399	Social Documentary	3
DMA 309	Music Technology	3
DMA 310	Digital Audio/Music Production	3

Qualified Non-DMA Courses

COM 325	Media Literacy	3
COM 361	Introduction to TV Production	3
COM 374	Film History	3
COM 375	Film Classics	3
COM 376	Film Genres	3
COM 491	Video Institute I	3
COM 492	Video Institute II	3
ENT 201	Introduction to Entrepreneurship	3
SOC 324	Visual Sociology	3

Game Design

Why study game design? The video game industry has been driven by phenomenal technological innovation and creativity. It's a constantly growing field and is expanding into areas such as simulation (e.g. medical, sports and product simulations), advertising, training and education, moving well beyond pure entertainment. As a Digital Media Arts major concentrating in Game Design, you will learn game design theory and history, character design, character animation, level design and mobile game development, using cutting-edge, industry standard tools. Students are also encouraged to take courses in Fine Arts Studio to strengthen their artistic skills as well as in Computer Science to learn more about the programming aspect of game development.

For more information about Game Design concentration, please e-mail Dr. P.J. Moskal (moskalp@canisius.edu).

Game Design Courses

DMA Courses

DMA 346	Video Games-History/Technique	3
DMA 347	Electronic Game Design	3
DMA 351	Game Level Design	3
DMA 352	Character Design	3
DMA 354	Game Development	3
DMA 355	Character Animation	3
DMA 371	Game Design for Mobile Devices	3
DMA 450	Serious Games	3

Qualified Non-DMA Courses

CSC 111	Introduction to Programming & 111L	4
CSC 112	Data Structures and Introduction to Programming Laboratory	4
CSC 112	Data Structures and Data Structures Laboratory	4
CSC 127	Introduction to Game Design and Intro to Game Design Laboratory	4
CSC 127	and Intro to Game Design Laboratory	4
CSC 360	Intelligent Systems and Intelligent Systems Laboratory	4
CSC 360	and Intelligent Systems Laboratory	4
FAS 120	Drawing I	3
FAS 131	Sculpture I	3
FAH 109	History of Architecture	3
PHI 291	Philosophy of Art	3

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Majors will design and construct effective messages through the use of digital tools.

Student work will:

- Objective A: Show awareness of “target audience” or demographic;
- Objective B: Exhibit control of focal point and control of visual attention of audience;
- Objective C: Exhibit clarity in communication, visual impact, aesthetic appeal;
- Objective D: Exhibit understanding of how to present portfolio and discuss his/her work.

Student Learning Goal 2

Majors will evince technical prowess in digital media.

Students will:

- Objective A: Execute a project that makes optimal use of software, coding/programming languages, and platforms;
- Objective B: Carry out basic tasks in a wide variety of digital media areas, including interactive design, digital video and audio editing, graphic manipulation, digital illustration, digital typography, 3-d modeling and animation;
- Objective C: Understand and be able to define concepts and terminology pertaining to a wide variety of digital media areas.

DMA 201 Introduction to Digital Media 3 Credits

Introduces the fundamentals of digital systems and technologies through class lecture and hands-on approaches. Software and hardware used for web design, multimedia, video production, graphics and audio production.

Fulfills College Core: Field 3 (Literature and the Arts)

Offered: every fall & spring.

DMA 212 2D Graphics 3 Credits

This course will familiarize students with techniques, file formats and applications for creation of 2D graphics. Students will develop digital image creation skills along with effective workflow habits.

Prerequisite: DMA 201 or permission of instructor.

Offered: every spring.

DMA 213 3D Graphics 3 Credits

This course is an introduction to digital 3D graphics for illustration, simulation, animation and game design. Students using Autodesk Maya, Mudbox and Unity game engine software will learn basic techniques of modeling, texturing, lighting and animation as they draw inspiration for their projects from the rich history of visual arts. This course is a prerequisite for all 300 level production courses that are part of the Game Design concentration.

Prerequisite: DMA 201 or permission of instructor.

Fulfills College Core: Field 3 (Literature and the Arts)

Offered: every spring.

DMA 214 Digital Design Concepts 3 Credits

Introduces the conceptual, perceptual and manual skills in traditional graphic design. Topics include typography and visual communication, color theory, the principles of form, structure, spatial design and photo manipulation.

Fulfills College Core: Field 3 (Literature and the Arts)

Offered: on campus every fall, and online every summer.

DMA 215 Digital Media Culture 3 Credits

Explores how digitization impacts our personal, business, cultural, institutional and international lives. Also examines the ways in which digital media transform communication and expression.

Fulfills College Core: Field 5 (Social Sciences)

Offered: every fall.

DMA 216 Digital Media Law 3 Credits

Introduces a wide range of legal and ethical issues in cyberspace, including: the First Amendment, copyright, fair use, libel, hate speech, pornography, obscenity, privacy, commercial speech and national security.

Offered: every spring.

DMA 217 Interaction Design 3 Credits

This course is an introduction to programming for designers using JavaScript and JavaScript based libraries such as JQuery, CreateJS and JavaScript for Unity game engine. Students will learn principles of Interaction Design and User-Centered Design to build interactivity into web pages for the purpose of advertising, training and entertainment.

Prerequisite: DMA 201 or permission of instructor.

Offered: every fall.

DMA 218 Motion Graphics 3 Credits

This course covers the fundamentals of key-frame based animation in Adobe After Effects. Students produce motion graphics for informational presentations, such as commercials and PSAs, as well as typographic effects and logo spins for movie trailers, video intros and promotional digital marketing projects.

Offered: every fall.

DMA 309 Music Technology 3 Credits

Explore music sequencing, midi, audio plug-ins and other tools used by professional musicians, sound designers and multimedia specialists. No music background required.

DMA 310 Digital Audio/Music Production 3 Credits

Learn fundamental techniques of digital audio and music production using current technologies in digital recording, software and audio post-production. Discuss current trends in audio production and the tools used for composing electronic music. No music background required.

Fulfills College Core: Field 3 (Literature and the Arts)

DMA 342 Introduction to Web Design 3 Credits

Introduction to the state of the art, on-line multimedia publishing. Working individually and in teams, students learn to publish well-designed World Wide Web documents that communicate effectively.

DMA 346 Video Games-History/Technique 3 Credits

This course provides an analytical and historical approach to the advancement of entertainment software. Encompassing cultural, professional, business, and scientific and technical evolution, the History of Video Games will communicate the socio-cultural impact of interactive entertainment on society.

DMA 347 Electronic Game Design 3 Credits

This course covers the art, craft and business of creating electronic games. Develop your own game concept, learn the basics of interactive authoring and produce a storyboard. Emphasis is placed on understanding the gaming industry and the languages of game design.

DMA 351 Game Level Design 3 Credits

Creating a game level takes planning, artistic and technical skill, user testing, and understanding of designer's vision. In this course students learn how to design game levels that provide challenges, support the story and are exciting to explore and interact with.

Prerequisite: DMA 213 or permission of instructor.

- DMA 352 Character Design** 3 Credits
This course is a comprehensive overview of 3D character design and development for games and simulations. Students start the process with concept sketches, then continue with modeling and rigging. The final result is an optimized, fully rigged character, ready for animation and real-time rendering in a game engine.
Prerequisite: DMA 213 or permission of instructor.
- DMA 354 Game Development** 3 Credits
This course is a hands-on overview of interactive techniques and game design approaches for development of games and simulations. Students explore concepts of procedural rhetoric, interactive storytelling, iterative design and teamwork as they develop a working prototype of a game or simulation.
Prerequisite: DMA 213 or permission of instructor.
Offered: fall of even-numbered years.
- DMA 355 Character Animation** 3 Credits
Character animation is one of the most important elements of game design. Students learn essential techniques and principles to create convincing, interactive character animations for games and simulations.
Prerequisite: DMA 213 or permission of instructor.
- DMA 363 Print Design** 3 Credits
Focuses on critical topics in layout, folding, binding and printing, as well as critical/creative issues in magazine, publication and high-end corporate design.
Prerequisite: DMA 212 or DMA 214.
Offered: spring of odd-numbered years.
- DMA 370 Designing for Mobile Devices** 3 Credits
Proliferation of mobile devices in our society has had great effect on how information is distributed, how content is produced and how people interact with digital content. In this course students learn how to create and design content targeted for mobile screens, and how to take advantage of mobile specific functionality such as touch, multi- touch, GPS and accelerometer.
Prerequisite: DMA 201 or permission of instructor.
Offered: spring of even-numbered years.
- DMA 371 Game Design for Mobile Devices** 3 Credits
Mobile platforms have become very popular for distribution of games. In this course students learn how to design and develop 2D and 3D mobile games with user-centric approach. Students explore game design techniques that take advantage of mobile specific hardware functionality such as: accelerometer, multi-touch and GPS.
Prerequisite: DMA 201 or permission of instructor.
- DMA 384 Typography** 3 Credits
This course will focus on typography as an element of graphic design. Through assignments, class discussion, and reading, students can expect a greater understanding of how typography can enhance creativity and communication.
- DMA 385 Digital Filmmaking** 3 Credits
This course introduces advanced SLR and digital cinema camera lens techniques for narrative filmmaking (shooting dramatic and comedic scenes). Production demos include lighting for filmmaking, boom mics, and camera support systems for dolly, crane and steady-cam shots. Final Cut and Adobe Premiere software is used to learn the techniques of narrative film editing.
Prerequisite: DMA 201 or permission of instructor.
- DMA 387 Commercial Filmmaking & Video** 3 Credits
Students create short-form TV and Web video commercials, learn camera and lens techniques for shooting action B-roll (sports, how-to, music video etc.) promotional videos, and branded films. This course also covers wireless audio and LED lighting equipment for run-and-gun interview shooting, a crucial skill for broadcast, advertising or documentary work.
Prerequisite: DMA 201 or permission of instructor.
- DMA 393 Advertising Design** 3 Credits
Offers experienced design students a series of challenging projects and exercises, characteristic of those found in the advertising industry. Projects will undergo proposal, development, and critique in a group setting. Projects will be done in collaboration with COM 320-Advertising Writing. This course fulfills Senior Project and Portfolio requirement for Graphic Design concentration.
Prerequisite: DMA 201 or permission of instructor.
Offered: spring of even-numbered years.
- DMA 395 Digital Illustration** 3 Credits
Don't violate copyrighted imagery off the web -- create your own! You don't have to know how to draw to create stunning graphics. Use Adobe CS to learn approaches, techniques and current trends of professional illustrators.
Prerequisite: DMA 201 or permission of instructor.
- DMA 399 Social Documentary** 3 Credits
This course fulfills the Senior Project and Portfolio requirement for the Digital Filmmaking concentration. Students examine a survey of important documentary photographers and filmmakers in order to understand the social function and ethical issues of documentary images. With the skills of the filmmaker, students realize how engagement with social issues is a key ingredient to their professional success in the industry.
Prerequisite: DMA 201, JRN 201, or permission of instructor.
Fulfills College Core: Core Capstone
Offered: every spring.
- DMA 442 Advanced Web Design** 3 Credits
This course is for students with a serious interest in web design. It aims to explore the current state of web design techniques and trends including responsive web design, custom WordPress themes, and e-commerce development. This course fulfills Senior Project and Portfolio requirement for Web Design concentration.
Prerequisite: DMA 342, or CSC 108, or DMA 217, or permission of instructor.
Offered: spring of odd-numbered years.
- DMA 450 Serious Games** 3 Credits
This course is an overview of a growing genre of Serious Games or games for purposes other than entertainment. Students learn about games for education, health, social change, marketing and training. The course concludes with a working prototype of a serious game, developed by small teams of students. This course fulfills Senior Project and Portfolio requirement for Game Design concentration.
Prerequisite: DMA 351, or DMA 354, or DMA 371, or permission of instructor.
Offered: fall of odd-numbered years.

DMA 488 Internship I Seminar 3-9 Credits

Student experientially learns communication functions in compatibly matched professional setting, locally or out-of-town. Faculty and on-site supervision. Seminar required. Pass/fail. May be repeated as DMA 498, 12-credit limit for DMA 488 and DMA 498 combined. Applications on Communication Studies Department website.

Prerequisite: junior or senior standing, minimum overall GPA of 2.50, minimum digital media arts average of 2.70, & approval by department faculty.

Offered: fall & spring.

DMA 491 Video Institute I 1-3 Credits

Students produce significant projects in video, film, and television. See Dr. Irwin or Professor O'Neil for additional information.

DMA 492 Video Institute II 3 Credits

Students produce significant projects in video, film, and television. See Dr. Irwin or Professor O'Neil for additional information.

DMA 493 Video Institute III 3 Credits

Students produce significant projects in video, film, and television. See Dr. Irwin or Professor O'Neil for additional information.

Fulfills College Core: Core Capstone

DMA 494 Video Institute IV 3 Credits

Students produce significant projects in video, film, and television. See Dr. Irwin or Professor O'Neil for additional information.

Fulfills College Core: Core Capstone

DMA 499 Independent Study 3 Credits

Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

English

In keeping with the college's Jesuit mission to educate the whole person, the English Department strives to nurture intellectual and spiritual growth through the study of literature and the practice of writing. The department fosters academic excellence through a diverse and rigorous curriculum that serves all students at Canisius. The English department is vitally committed to student learning in the Canisius Core Curriculum. Writing About Literature (ENG 101), a required foundations course in the Core, studies literature as creative expression and builds critical and analytical skills through a writing process that includes a research assignment. In addition, the English department offers a range of literature and writing courses in the Core's Breadth of Knowledge field for Literature and the Arts (Field 3). These courses, taught at all levels, emphasize the aesthetic value of the works studied. Several English courses also fulfill Core cross-disciplinary knowledge requirements (in diversity or global awareness) and Core cross-disciplinary skills requirements (in oral communication or advanced writing intensive).

The English Department offers two majors: English and Creative Writing.

- English Major (p. 131)
- Creative Writing Major (p. 135)

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major.

The English Department offers four minors:

- English Minor (p. 133)
- The Writing Minor (p. 137)

- Creative Writing Minor (p. 137)

- Theatre Arts Minor (p. 137)

English

Chair: Mick Cochrane, PhD

INTRODUCTION

The English major is structured to help students build their reading, writing, and critical skills, as they gain broad exposure to British and American literature and develop a particular interest within the field of English studies. Two-hundred level courses, usually taken in the sophomore year, are organized around a particular literary genre or theme and emphasize literary analysis. ENG 299 introduces majors to critical methods and theoretical approaches to reading and writing, providing a gateway for studying literature at the upper-level. Courses numbered 300 and above are typically based in literature from a particular historical period and usually focus on a tradition, issue, or topic vital to English studies. These more advanced courses often require student presentations, critical approaches, and researched papers. Finally, an English capstone seminar helps students synthesize skills and knowledge from their coursework and reflect upon the meaning and value of their English major.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please see our English department website (<https://www.canisius.edu/academics/programs/english>).

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in English.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Dual majors involving English are available in a large number of areas, including creative writing, communication, history, modern languages, philosophy, psychology, sociology, and biology. Interested students should consult the chairs of both departments. With the permission of both chairs, inter-disciplinary courses may be used for credit toward the major requirements in both departments.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

INTERNSHIPS

In addition to the classroom experience, internships in local businesses, arts, non-profit and social service oriented organizations prepare majors for careers in all areas where effective communication and understanding are essential, such as teaching, writing, law, social work, mass media and public relations.

CO-CURRICULAR ACTIVITIES

Additional department activities, designed to make literature a more integral part of the academic and creative life of English majors and other members of the college community, include The Quadrangle literary magazine, Sigma Tau Delta (International English Honors Society), and the Canisius College Contemporary Writers' Series. Also available for students are The Griffin college newspaper and the Little Theatre.

ADDITIONAL COURSE CONSIDERATIONS

English Honors

English Honors is a flexible program designed to offer interested and motivated English majors the chance to earn honors designation by participating in innovative seminars and working with a faculty mentor in the writing of an original thesis.

English Honors seminars are unique courses, limited in enrollment, designed by faculty around especially engaging questions, topics, and texts. Some are interdisciplinary; some involve both critical and creative writing; others are organized around a particular period, theme, critical approach or major writer. Typically one English Honors seminar is offered each semester. The honors thesis is a long critical essay or creative project, written on a topic of the student's own choosing under the direction of a faculty mentor, the culmination of a semester's reading, researching and writing. You can read more about the program on the English Honors website (<https://www.canisius.edu/academics/programs/english/english-honors-program>).

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

ENG 299

Introduction to English Studies

3

English 300 level Shakespeare: (one)	3
English 300 level British Literature before 1800: (one)	3
English 300 level American Literature before 1900: (one)	3
English 200 level or 300 level Writing/Rhetoric: (one)	3
ENG 450 English Capstone Seminar	3
200-level English electives: 2 courses	6
English Major electives: 4 courses (3/4 at 300-level)	12
Total Credits	36

Prerequisites for 200-level and above English courses: FYS 101 and ENG 101, or permission of the department chair. Acting courses (I and II) carry no prerequisites and are open to freshmen.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Sophomore

Fall	Spring
200-level English elective	ENG 299
200-level English elective	Writing/Rhetoric or Major elective

Junior

Fall	Spring
Shakespeare	Pre-1800 British Literature
Pre-1900 American Literature	Writing/Rhetoric or Major elective

Senior

Fall	Spring
Major Elective	English Major Senior Seminar
Major Elective	Major Elective

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Students will demonstrate an understanding of literary continuity through attention to different literary genres, literary traditions, historical periods, or national literatures.

Students will:

- **Objective A:** Students will evaluate literary works within specific genres, traditions, periods, or national literatures;
- **Objective B:** Students will evaluate literary works across specific genres, traditions, periods, or national literatures.

Student Learning Goal 2

Students will demonstrate an understanding of literary texts as works of art.

Students will:

- **Objective A:** Analyze literary works through carefully selected textual examples;
- **Objective B:** Analyze literary works in terms of literary language or structure;

Student Learning Goal 3

Students will demonstrate an understanding of the role of literary criticism in shaping the meaning and significance of literature.

Students will:

- **Objective A:** Incorporate critical sources appropriately into their writing;
- **Objective B:** Integrate critical sources effectively into their analysis of literature;
- **Objective C:** Situate their interpretation of literature in terms of critical issues or theories;
- **Objective D:** Students will use MLA bibliographic and citation style.

Student Learning Goal 4

Students will demonstrate writing skills commensurate with the development of a clear thesis, logical organization, appropriate use of evidence, and command of English grammar and usage.

Students will:

- **Objective A:** Students will demonstrate the ability to introduce a literary topic and assert a thesis;
- **Objective B:** Students will demonstrate the ability to use evidence to make a point about literature;
- **Objective C:** Students will demonstrate the ability to develop an argument about literature with coherent paragraphs;
- **Objective D:** Students will demonstrate the ability to develop an argument about literature with a logical overall structure;
- **Objective E:** Students will demonstrate the proper use of grammar and punctuation, as well as versatility with vocabulary and sentence structure.

For non-majors only. The Minor is a six-course sequence that includes many of the basic requirements for English majors.

English 200 level Elective Course (one)	3
ENG 299 Introduction to English Studies	3
English 300/400 level British Literature course (one)	3
English 300/400 level American Literature course (one)	3
English 300 level Shakespeare course (one)	3
English 200/300/400 level Writing/Rhetoric (one)	3
Total Credits	18

ENG 100 Introduction to College Writing 3 Credits
 Designed to help improve proficiency in English composition. Involves frequent writing, practicing strategies for gathering ideas, drafting, revising and editing, and reading/studying prose models.

ENG 101 Writing about Literature 3 Credits
 Introduces students to the study of literature as a creative expression of ideas. Students will sample literary work from the major genres (poetry, fiction, drama, literary nonfiction). They will develop a literary vocabulary; hone their critical and analytical skills; and practice the writing process, including completion of a research assignment.

ENG 147 Acting I 3 Credits
 Introduction to the art of acting. Through lecture and practice in acting assignments in class, students gain understanding of the actor's role in theater.
Restriction: none (open to any student, including freshmen).
Fulfills College Core: Field 3 (Literature and the Arts), Oral Communication

ENG 148 Acting II 3 Credits
 Continuation of Acting I.
Restriction: none (open to any student, including freshmen).
Fulfills College Core: Field 3 (Literature and the Arts), Oral Communication

ENG 201 Poetry 3 Credits
 Introductory survey of poetry for majors and non-majors.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)

ENG 202 Drama 3 Credits
 Introductory survey of drama for majors and non-majors.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)

ENG 205 Varieties of the Essay 3 Credits
 Practice in writing several kinds of essays. Readings will provide models for writing on topics such as interpersonal relationships, cultural values, politics, nature and the environment. Special attention given to writing style.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive

ENG 208 Novel 3 Credits
 Introductory survey of the novel for majors and non-majors.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.

ENG 211 Science Fiction 3 Credits
 Survey of science fiction for majors and non-majors.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Field 3 (Literature and the Arts)

ENG 213 Word and Image 3 Credits
 Focuses on the formal and thematic elements of literary texts, films and texts composed of both words and images.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Field 3 (Literature and the Arts)

ENG 218 Literature and Medicine 3 Credits
 Surveys a range of Western cultural literary representations of health and disease, emphasizing the different power positions occupied by patient, caretaker, and doctor. Open to majors and non-majors.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)

ENG 219 Literature and Psychology 3 Credits
 Focuses on the convergence of the disciplines of literature and psychology, especially the ways in which psychology has drawn on literary genres, techniques and motifs. Open to majors and non-majors.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)

ENG 220 Contemporary Catholic Fiction 3 Credits
 Study of novels and short stories by Catholic American writers from 1950 to the present, such as Flannery O'Connor, Walker Percy, Mary Gordon and Andre Dubus.
Prerequisites: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Field 3 (Literature and the Arts)

ENG 223 Images of Women in Literature and Film 3 Credits
 Representations of women as major characters in literature and film.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)

- ENG 224 The Journey in World Literature** 3 Credits
Explores the concept of the journey in international literature from a number of cultural and intellectual perspectives.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts), Global Awareness
- ENG 225 The Journey in American Literature** 3 Credits
Explores the concept of the journey in American Literature to examine the multi-cultural character of the United States.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Diversity, Field 3 (Literature and the Arts)
- ENG 233 The Quest in Medieval Literature** 3 Credits
The theme of the quest focuses this survey of medieval literature which includes texts from Anglo-Saxon poetry, the French Lais, and the Arthurian legends. The class also considers how these Medieval texts have been adapted in contemporary film and the stage.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)
- ENG 285 Animals in Film and Literature** 3 Credits
This advanced writing-intensive course enables students to explore and evaluate representations of animals, as well as how those representations signify human uses and understandings of animals, in a range of literary texts and films.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)
- ENG 294 Introduction to Creative Writing** 3 Credits
Workshop in the fundamentals of poetry and fiction writing, focusing on the close study and discussion of both student manuscripts and professional texts.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)
- ENG 299 Introduction to English Studies** 3 Credits
Introduction to the essentials of literary analysis and interpretation. Focusing on the rigorous analysis of poetry, prose narrative and drama chosen from different historical periods, the course will stress writing with critical awareness about literature.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
- ENG 301 British Literature I** 3 Credits
A survey of British literature from Medieval times through the Seventeenth Century.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
- ENG 305 Age of Shakespeare** 3 Credits
A survey of poetry, prose, and drama in the vibrant English Renaissance.
Prerequisites: FYS 101 and ENG 101, or permission of the department chair.
Offered: spring of odd-numbered years.
- ENG 306 Eighteenth Century Literature** 3 Credits
A survey of the poetry and prose of major British authors in the "long" eighteenth century.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
- ENG 308 Nineteenth Century British Literature** 3 Credits
A survey of the major works and authors of the Romantic and Victorian periods.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
- ENG 309 Modern and Contemporary British Literature** 3 Credits
A survey of representative figures and genres in British literature of the twentieth-century and beyond.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
- ENG 315 American Literature I** 3 Credits
Studies the formation of a national literature from origins to 1900 through a diversity of American writers. (Diversity).
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Diversity
- ENG 316 Revising the American Renaissance** 3 Credits
The course looks at a prolific period in American Literature from 1820-1865 examining romanticism, sentimentality, the slave narrative and periodical literature.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
- ENG 317 Heroes and Heroines in American Literature** 3 Credits
A study of uniquely American heroic types, including the Alger hero, the western hero and the picaresque hero. Representative texts studied in detail, in historical and cultural context.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
- ENG 319 Special Topics in American Literature** 3 Credits
The study of a particular theme, mode or period, such as "Captivity Narratives" and "The Rise of the American Novel." Topics vary semester to semester.
Prerequisites: FYS 101 & ENG 101, or permission of the department chair.
- ENG 322 Shakespeare I** 3 Credits
Introductory survey for majors. Plays drawn from the categories of comedy, tragedy and history.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
- ENG 323 Shakespeare II** 3 Credits
Works selected with emphasis on specific themes, structures, or styles. Shakespeare I is not a prerequisite.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
- ENG 331 Studies in Irish Literature** 3 Credits
An historical survey focused mainly on twentieth century Irish writers. An aim of the course is to define Irish literature and identify its distinguishing features.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
- ENG 339 Southern Literature** 3 Credits
Studies twentieth-century literary fiction from the U.S. Southern region in terms of Southern history and culture, especially the legacy of the institution of slavery and the Civil War. Authors include William Faulkner, Flannery O'Connor, Toni Morrison, and others.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Diversity
- ENG 342 Writing Young Adult Fiction** 3 Credits
Combines the study and the practice of the genre, reading and writing. Students study young adult novels in order to gain a sense of the variety of approaches and techniques available to a writer of YA fiction and, in a workshop setting, students propose, draft, revise, and edit YA stories of their own.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
- ENG 347 English Novel I** 3 Credits
Studies a range of seventeenth- and eighteenth-century novels and their contexts, including both experimental works and traditional domestic tales.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.

- ENG 350 The Theater Experience** 3 Credits
Up close and personal experience in theater production through attendance at professional plays in the city, and hands-on experience in reading and producing short works in the classroom.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Oral Communication
- ENG 365 English Core Capstone** 3 Credits
Themed courses that integrate core curriculum attributes and skills. For majors and non-majors. Topics vary by semester and have recently included "Culture and Conflict: Re-Interpreting World War I," "Memoir: Individual and Culture," and "Post-Colonial Literatures".
Prerequisites: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Core Capstone
- ENG 368 Native American Literature** 3 Credits
A survey of contemporary Native American literature, covering major and lesser-known authors. The course traces the origins of traditions, both thematic and structural.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
- ENG 369 Contemporary American Fiction** 3 Credits
Study of recently published novels and short stories, exploring the formal and thematic range of new fiction and focusing on the contemporary issues it reflects.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Field 3 (Literature and the Arts)
- ENG 373 Jane Austen** 3 Credits
Studies the novels along with literary criticism and other eighteenth century texts in order to understand Austen and her time.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
- ENG 381 Postcolonial Literature** 3 Credits
Post World War II literature from areas of the globe that have recently emerged from European colonization; may include literature and film from Africa, the Middle East, South Asia, the Caribbean, or Ireland.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Global Awareness
- ENG 382 African American Literature** 3 Credits
A survey of major writers and historical trends in African American literature from the time of slavery to the present.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
- ENG 383 Research Writing: Process and Product** 3 Credits
Intensive practice in all stages of research paper writing, including developing a topic, defining a purpose, finding credible sources, annotating a bibliography, and drafting the paper. A formal oral presentation of research is also required.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive
- ENG 385 Persuasive Writing** 3 Credits
Analysis and construction of arguments. Readings on issues in law, politics and education.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive
- ENG 388 Literary Publishing** 3 Credits
A practicum combining the study of the history of the literary magazine in America with the practical work of editing *The Quadrangle*, the Canisius College literary magazine.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
- ENG 389 Business Communication** 3 Credits
Practice in writing letters, memos and reports, with models and strategies offered for each form.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive
- ENG 391 Advanced Creative Writing: Fiction** 3 Credits
Workshop for experienced writers in fiction.
Prerequisite: minimum grade of B in ENG 294 or permission of instructor.
- ENG 392 Advanced Creative Writing: Poetry** 3 Credits
Workshop for experienced writers in poetry.
Prerequisite: minimum grade of B in ENG 294 or permission of instructor.
- ENG 393 Advanced Creative Writing: Memoir** 3 Credits
Workshop for experienced writers in memoir.
Prerequisite: minimum grade of B in ENG 294 or permission of instructor.
- ENG 396 English Honors Seminar** 3 Credits
English Honors seminars are designed by faculty around especially engaging questions, topics, and texts. Some are interdisciplinary; some involve both critical and creative writing; others are organized around a particular period, theme, critical approach, or major writer. Majors do not need to be in the English Honors Program to take this course.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
- ENG 411 Playwriting** 3 Credits
The playwriting process. Brief review of dramatic technique and theory, followed by working through the process from germinal idea to finished playscript.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
Fulfills College Core: Advanced Writing-Intensive, Field 3 (Literature and the Arts)
- ENG 450 English Capstone Seminar** 3 Credits
A culminating experience where students apply critical skills and knowledge gained from their English major coursework to an intensive study of a particular literary theme or subject. Topics vary by semester.
Prerequisite: FYS 101 & ENG 101, or permission of the department chair.
- ENG 490 Creative Writing Senior Capstone** 3 Credits
Focus on preparation of a portfolio of polished work, creation of an artistic statement, submission of professional work, and career opportunities for writers.
Prerequisite: minimum grade of B in ENG 294 or permission of instructor.
- ENG 497 English Honors Thesis** 3 Credits
The honors thesis is a long paper, written on a topic of the student's choosing under the direction of a faculty mentor, the culmination of a semester's reading, researching, and writing.
- ENG 498 Internship** 3 Credits
Internships are by application only and must be approved by the associate dean.

Creative Writing

Director: Eric L. Gansworth

INTRODUCTION

In keeping with the college's Jesuit mission to educate the whole person, the English Department strives to nurture intellectual and spiritual growth through the study of literature and the practice of writing. The department fosters academic excellence through a diverse and rigorous curriculum that serves all students at Canisius.

The department's creative writing major is structured to help students develop their writing skills, as they gain broad exposure to literature in a variety of periods, genres, and modes. In English 294 students explore the fundamental skills of fiction and poetry writing. They learn to read as writers, and become acquainted with the workshop method, which involves close reading and critiques of student manuscripts. In courses numbered 300 and above, they have the opportunity to gain more in-depth practice of a particular genre. Finally, in the senior creative writing capstone students will learn to do all the things working writers do: prepare, submit, and present work consistent with professional standards; understand and articulate how their work fits into larger literary traditions; and read in the manner of professional writers, attentive to textual choices and strategies and their effects on readers. Additional information is available at the Creative Writing website (<https://www.canisius.edu/academics/programs/creative-writing>).

MAJOR EXPERIENCES

The Canisius College Contemporary Writers Series brings nationally known writers to meet with Canisius students and to discuss their craft in an informal setting. The Quadrangle is the Canisius journal of literary and visual arts. Students may publish their own pieces or work as editors gaining real-world publishing skills. Internships with local literary publishers and arts organizations provide our students the opportunity to participate in the vibrant Buffalo literary scene and to acquire professional experience as writers, teachers, editors, and administrators.

QUALIFICATIONS

Students must maintain a 3.0 GPA in their major and a 2.0 overall average to graduate with a degree in creative writing. Students must earn at least a grade of B in ENG 294 in order to enroll in advanced workshops.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be

completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

ENG 294	Introduction to Creative Writing	3
ENG 299	Introduction to English Studies	3
Contemporary literature: one course		3
British literature: one course		3
American literature: one course		3
ENG 490	Creative Writing Senior Capstone	3
Select three of the following:		9
ENG 342	Writing Young Adult Fiction	
ENG 388	Literary Publishing	
ENG 391	Advanced Creative Writing: Fiction	
ENG 392	Advanced Creative Writing: Poetry	
ENG 393	Advanced Creative Writing: Memoir	
ENG 411	Playwriting	
ENG 498	Internship	
Additional electives: 3 literature courses approved by program director		9
Total Credits		36

Prerequisites for 200-level and above English courses: FYS 101 and ENG 101, or permission of the department chair. ENG 294 must be taken at Canisius by all students committing to the program. Transfer Creative Writing credit may be used as a Creative Writing Elective. ENG 294 (or permission of the instructor) is a prerequisite for ENG 391, ENG 392, ENG 393 and ENG 490. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Creative Writing website. (<http://www.canisius.edu/creative-writing>)

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Sophomore	
Fall	Spring
ENG 294	Creative Writing elective
ENG 299	American Literature requirement
Junior	
Fall	Spring
Creative Writing elective	Creative Writing elective
British Literature requirement	Contemporary Literature requirement

Senior	
Fall	Spring
Literature elective	ENG 490
Literature elective	Literature elective

LEARNING GOALS & OBJECTIVES

Learning Goal 1

Students will demonstrate the ability to produce a polished, professional-quality portfolio of creative writing and an understanding of how to submit the work for publication.

Students will:

- **Objective A:** Draft, revise, and edit a technically accomplished creative manuscript (fiction, poetry, drama, or creative nonfiction).
- **Objective B:** Research literary journals and compile a list of magazines that fit their work.
- **Objective C:** Prepare a submission to a literary magazine: compose a cover letter and prepare a manuscript that conforms to professional conventions in the field.

Learning Goal 2

Students will develop an understanding of their own influences and aesthetic values as writers and how their own work fits into larger literary traditions.

Students will:

- **Objective A:** Describe the writers, texts, and movements that influence their work.
- **Objective B:** Articulate their aesthetic values.
- **Objective C:** Outline their own artistic projects: what they aim to accomplish in their work.

Learning Goal 3

Students will demonstrate the ability to perform their work effectively in public.

Students will:

- **Objective A:** Make an appropriate selection of their own work for public performance.
- **Objective B:** Introduce themselves and their work to an audience in an engaging way and place their selections in context.
- **Objective C:** Read or recite their work clearly and expressively.

Learning Goal 4

Students will demonstrate the ability to read as writers.

Students will:

- **Objective A:** Be able to identify and explain choices professional writers make in literary texts.
- **Objective B:** Be able to describe the effects of these choices.
- **Objective C:** Be able to discuss how they may interpolate similar choices in the creation of their own work.

In addition to the major, a creative writing minor is offered: a five-course sequence that includes many of the basic requirements for creative writing majors.

This minor is available to any student (both majors and non-majors).

It is a five course program that provides interested students the opportunity to learn and practice the fundamentals of writing stories, poems, essays and plays. For more information, please visit the Creative Writing website (<https://www.canisius.edu/academics/programs/creative-writing>).

ENG 294	Introduction to Creative Writing	3
ENG 490	Creative Writing Senior Capstone	3
Select three of the following Creative Writing Courses:		9
ENG 342	Writing Young Adult Fiction	
ENG 388	Literary Publishing	
ENG 392	Advanced Creative Writing: Poetry	
ENG 411	Playwriting	
ENG 498	Internship	
Total Credits		15

The Writing Minor

5 courses (for majors and non-majors)

Required Courses

ENG 385	Persuasive Writing	3
ENG 498	Internship ¹	3

Elective Courses

Select three of the following:		9
ENG 205	Varieties of the Essay	
ENG 294	Introduction to Creative Writing ²	
ENG 383	Research Writing: Process and Product	
ENG 388	Literary Publishing	
ENG 389	Business Communication	
ENG 411	Playwriting ²	
Total Credits		15

¹ One of the student's choice, with advice of a faculty supervisor.

² No more than one of the following courses may be taken for the minor: ENG 294 & ENG 411.

Theatre Arts Minor

This minor is open to any student (majors and non-majors). It is a five-course sequence that includes course work in acting and production as well as in dramatic literature and playwriting.

ENG 147	Acting I	3
or ENG 148	Acting II	
ENG 202	Drama	3
ENG 350	The Theater Experience	3
Select two of the following:		6
ENG 411	Playwriting	
Theatre arts elective		
Theatre arts elective		
ENG 498	Internship	
Total Credits		15

Environmental Science

Director: Katie Costanzo, PhD

INTRODUCTION

The Environmental Science major provides both theoretical and applied knowledge for students interested in professional careers in the environmental sciences, e.g., environmental consulting, environmental

regulation and monitoring, environmental conservation, environmental health sciences (toxicology, occupational health, health physics, industrial hygiene, water quality industry) and the ecological sciences. In addition, the curriculum facilitates entry into graduate programs in the ecological, environmental health and environmental sciences.

The Environmental Science program is designed to have an interdisciplinary focus with required and recommended courses coming from biology, chemistry, geology, philosophy and social sciences. In addition, it is designed to provide needed job experiences through the completion of two required internships. For students interested in graduate study in the environmental sciences, one internship may be replaced with independent research in the environmental sciences.

For a more detailed description of the faculty, facilities, academic and co-curricular opportunities please visit the Environmental Science website (<https://www.canisius.edu/academics/programs/environmental-science>).

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and support courses and a 2.0 overall average to graduate with a degree in Environmental Science.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

The advisor may be changed at the student's request.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Your advisor will be able to assist with course planning to facilitate a second major, so please let your advisor know if you are considering a dual major

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

We encourage Environmental Science majors to take humanities classes that combine social and environmental issues like Environmental Ethics (PHI 244), Environment and Society (SOC 234), and Theological Ethics and Environmental Justice (RST 342).

BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
PSY 201 or MAT 141	Basic Statistics for Behavioral Sciences Inferential Statistics and Computers for Science	3-4
PSY 401 or MAT 111	Advanced Statistics Seminar Calculus I	3-4
BIO 320	Field Ecology	4
BIO 360	Environmental Health	3
CHM 232 & 232L	Environmental Analytical Chemistry and Environmental Analytical Chemistry Laboratory	4
ENV 100	Introduction to Environmental Science Seminar	1
ENV 200	Introductory Hydrology	4
ENV 352	Environmental Science Seminar II	1
ENV 498 & ENV 499	Environmental Science Internship I and Environmental Science Internship II	6
GEOL 120 & 120L	Introductory Geology and Introductory Geology Laboratory	4
Total Credits		57-59

MAJOR ELECTIVES

Students must complete four of the following (at least three with labs):

ABEC 341 & 341L	Urban Ecology and Urban Ecology Lab (lab optional)	4
BIO 212 & 212L	Biochemistry and Cell Biology II and Biochemistry and Cell Biology Lab II (lab required)	4

BIO 305 & 305L	Environmental and Pathogenic Microbiology and Environmental and Pathogenic Microbiology Lab (lab optional)	4
BIO 322	Conservation Biology	3
BIO 335 & 335L	Plant Biology and Plant Biology Lab (lab optional)	4
BIO 343	Entomology (lab required)	4
BIO 365	Vertebrate Zoology and Ecology (lab required)	4
BIO 366	Ornithology (lab required)	4
BIO 370 & 370L	Plant Morphology and Plant Morphology Lab (lab required)	4
BIO 375 & 375L	Community Ecology and Community Ecology Laboratory (lab optional)	4
BIO 377	Freshwater Biology (lab required)	4
BIO 378 & 378L	Wetlands and Wetlands Laboratory (lab optional)	4
CHM 301 & 301L	Classical Physical Chemistry and Classical Physical Chemistry Laboratory (lab optional)	4
ECO 310	Introduction to Geographic Information Systems	3
PHY 201 & 201L	College Physics I and College Physics I Laboratory (lab required)	4

NOTE: Most classes are offered every other year. Please check the advisement guide each semester to see which classes are being offered. The advisement guide will be used to indicate which courses students in each class year should be taking and when internship applications need to be submitted.

MAJOR EXPERIENCES

All environmental science majors must complete two internship experiences. Recent internships have included Ecology and Environment, New York State Department of Environmental Conservation, U.S. Fish and Wildlife Service, Iroquois National Wildlife Refuge, Penn Dixie Paleontological and Outdoor Education Center, Tiffet Nature Preserve, and the Buffalo Museum of Science. We encourage students to work with any faculty member in the program to find internships that will best meet their goals and needs.

LEARNING GOALS & OBJECTIVES

Learning Goal 1

Students will develop competency with respect to knowledge having a firm grasp of the basic concepts in environmental science.

Students will:

- Objective A: Demonstrate an understanding of general environmental concepts from ecology, geology, hydrology, and analytical chemistry;
- Objective B: Demonstrate detailed knowledge within at least two areas of environmental science;
- Objective C: Connect previously learned material with real-life environmental situations.

Learning Goal 2

Students will develop problem-solving skills being able to perform the following.

Students will:

- Objective A: Read and interpret data;
- Objective B: Design an experiment to address a specific hypothesis;

- Objective C: Critically analyze an article from the original scientific literature or a professional report.

Learning Goal 3

Students will demonstrate mastery with respect to technical skills.

Students will:

- Objective A: Effectively communicate scientific material in written form;
- Objective B: Draw a graph;
- Objective C: Design a table.

ENVIRONMENTAL SCIENCE COURSES

ENV 100 Introduction to Environmental Science Seminar 1 Credit
Introduction to the field of environmental science. Information about a variety of careers is included. Required in freshman or sophomore year.
Offered: spring 2017.

ENV 200 Introductory Hydrology 4 Credits
Introduction to hydrologic processes, methods for quantifying hydrologic parameters and processes, and practical exposure to conducting and reporting hydrological studies. Lab required.
Prerequisite: GEOL 120 & GEOL 120L.
Offered: anticipated spring 2018.

ENV 352 Environmental Science Seminar II 1 Credit
Students attend scientific talks and present information relevant to their internship experiences. Career preparations also included.
Offered: spring.

ENV 401 Independent Research 1-3 Credits
Independent laboratory research in environmental science conducted under the supervision of a faculty member. Arrangements must be made prior to registration.
Prerequisite: written permission of faculty member & program director.
Offered: fall & spring.

ENV 498 Environmental Science Internship I 1-3 Credits
Practical experiences in the environmental sciences. Students must complete two internships in different areas of environmental sciences. Internships require an application and approval by the associate dean.
Prerequisite: junior or senior standing, minimum GPA of 2.0 in the major, a positive recommendation from a faculty member, & a completed & approved internship application.
Offered: fall & spring.

ENV 499 Environmental Science Internship II 1-3 Credits
Practical experiences in the environmental sciences. Students must complete two internships in different areas of environmental sciences. Internships require an application and approval by the associate dean.
Prerequisite: junior or senior standing, minimum GPA of 2.0 in the major, a positive recommendation from a faculty member, & a completed & approved internship application.
Offered: fall & spring.

GEOLOGY COURSE

GEOL 120 Introductory Geology 3 Credits

Basic concepts, including uniformitarianism, the rock cycle, the hydrologic cycle, tectonics and surface processes. Also covers how humans affect and are affected by their environment. Lab required. Students may not receive credit for both GEOL 120 and PHY 130.

Corequisite: GEOL 120L.

Fulfills College Core: Field 6 (Natural Sciences)

Offered: anticipated fall 2017.

GEOL 120L Introductory Geology Laboratory 1 Credit

Required lab for GEOL 120.

Corequisite: GEOL 120.

Environmental Studies

Director: Erin Robinson, PhD

INTRODUCTION

Environmental problems are more visible in our society than ever before. In order to address these issues, there is an ever present need to develop an understanding of the social and natural systems that foster the creation and resolution of environmental issues. Cultural, economic, and social systems provide the structure within which environmental problems are created and solved.

The Environmental Studies BA focuses on interdisciplinary connections between environmental and social systems. The program engages students to think critically about environmental issues and offers active learning experiences for students to apply their knowledge. Combining environmental science with social sciences, business and economics, and the humanities ensures an integrated perspective on environmental issues which lays a foundation for a wide range of careers. The interdisciplinary nature of the program allows students to combine ways of knowing which fully address the multiple facets and complex systems of environmental issues. Students take a series of required courses for the major and then select a specialization option to further focus their knowledge.

ENVIRONMENTAL STUDIES MAJORS CAN SELECT A SPECIALIZATION TRACK MADE UP OF FIVE COURSES

Specialization Tracks include Environmental Justice, Environmental Conservation and Administration, Sustainable Economics, Environmental Literacy and Public Health. Students can specialize in one area, or select a combination of electives from different tracks that best meet their interests. Each student will select four electives and an internship.

All Environmental Studies majors will complete an internship (EVST 498). Internship opportunities will range from local and regional opportunities to international opportunities through partnerships with well-established environmental organizations.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Environmental Studies website (<https://www.canisius.edu/academics/programs/environmental-studies>).

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Environmental Studies.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Students should consult with Dr. Erin Robinson, Director of Environmental Studies, for current advisement information. Students are advised to be familiar with their Griff Audit.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

EVST 110	Science of Environmental Problems I	3
EVST 111	Science of Environmental Problems II	3
SOC 234	Environment and Society	3
Select one of the following:		3

SOC 342	Social Research Methods	
PSC 217	Research Methods	
ANT 351	Qualitative Research Methods	
RST 342 or PHI 244	Theological Ethics and Environmental Justice Environmental Ethics	3
ECO 101	Principles of Macroeconomics	3
ECO 310 or ECO 311	Introduction to Geographic Information Systems Metropolitan Economic Development and GIS	3
SOC 324	Visual Sociology	3
Total Credits		24

MAJOR ELECTIVES

Students need to complete 5 additional courses: 4 courses from any of the designated major tracks; and EVST 498.

Environmental Justice Track

Focuses student attention on social and environmental justice through the use of critical thinking of structural problems and how these issues are applied to environmental problems and human society.

EVST 250	Nature, Culture and Interpretation	3
EVST 275	Global Environmental Problems	3
SOC 273	Social Movements and Social Change	3
SOC 340	Sociology of the City	3
PHI 245	Animal Ethics	3
PSY 329	Leadership and Motivation	3

Environmental Conservation and Administration

Focuses student attention on the movements for conservation practices and the legal, historical, and organization implications for the welfare of the environment.

EVST 259	Environmental History of the United States	3
EVST 275	Global Environmental Problems	3
COM 302	Small Group Communication	3
ENT 101	Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation	3
PSC 242	International Organizations	3

Sustainable Economics

Focuses student attention on the development of sustainable business practices from a systems approach. Enables students to develop an understanding of the nature of green economic practices.

EVST 275	Global Environmental Problems	3
ENT 101	Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation	3
ENT 314	Social Entrepreneurship and Sustainability	3
MGT 440	Global Supply Chain Management	3

Environmental Literacy and Public Health

Focuses student attention on the role of information literacy in environmental issues. Allows for critical perspective and analysis of the role of science, risk, and communication in society today.

EVST 275	Global Environmental Problems	3
COM 348	Environmental Communication	3

BIO 116	Disease: Myth and Reality	3
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MAJOR EXPERIENCES

Students are required to complete an internship with an environmental organization, EVST 498. Additionally, students are encouraged to pursue community based learning opportunities as they pertain to their interests and course selection.

ADDITIONAL COURSE CONSIDERATIONS

Freshman

Fall	Spring
EVST 110	EVST 111

ECO 101

Sophomore

Fall	Spring
Select one of the following:	SOC 234

SOC 342	Track Option Elective
PSC 217	

ANT 351

RST 342 or PHI 244

Junior

Fall	Spring
ECO 310	Track Option Elective

Track Option Elective

Senior

Fall	Spring
EVST 498	Track Option Elective
	SOC 324

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Environmental Studies majors will demonstrate knowledge of complex environmental systems and environmental issues problems in scientific, cultural, and social realms.

Students will:

- Objective A: Critically evaluate information on human/environmental systems;
- Objective B: Integrate human ecology and science of environmental problems;
- Objective C: Articulate issues of social construction of science.

Student Learning Goal 2

Environmental Studies majors will demonstrate an understanding of the foundations of environmental problems in society from an interdisciplinary approach. (Focusing on, but not limited to the social sciences and humanities perspectives.)

Students will:

- Objective A: Evaluate information on political economy of environmental issues;
- Objective B: Demonstrate knowledge of complex theories of environmental problems;

- Objective C: Communicate relationships between social institutions and environmental problems.

Student Learning Goal 3

Environmental Studies majors will demonstrate scientific literacy of environmental issues.

Students will:

- Objective A: Critically evaluate literature on environmental problems;
- Objective B: Develop relevant research questions for environmental investigation;
- Objective C: Use methods and tools of environmental research, including statistical analysis, GIS, and other techniques;
- Objective D: Analyze findings from original research.

Student Learning Goal 4

Environmental Studies majors will articulate issues of environmental justice and social systems.

Students will:

- Objective A: Articulate ethical aspects of environmental problems;
- Objective B: Synthesize issues of race and class in connection with environmental issues;
- Objective C: Integrate environmental justice as an aspect of social justice.

Student Learning Goal 5

Environmental Studies majors will demonstrate readiness to enter post graduate career and educational opportunities.

Students will:

- Objective A: Demonstrate skills needed to compete in green careers, including grant writing and oral communication;
- Objective B: Complete an internship with an established environmental organization;
- Objective C: Collaborate with local, regional, national, and international professionals in environmental career and post graduate educational settings.

EVST 110 Science of Environmental Problems I **3 Credits**

Environmental problems are defined as problems that result from interactions between humans and the natural environment. This course is designed to provide a conceptual framework for understanding and analyzing environmental problems, an introduction to the scientific basis of key environmental problems, and an introduction to scientific solutions to environmental problems.

Fulfills College Core: Field 6 (Natural Sciences)

EVST 111 Science of Environmental Problems II **3 Credits**

This course is designed to provide a conceptual framework for understanding and analyzing environmental problems, to the scientific basis of key environmental problems and their solutions. An extension from EVST 110.

Fulfills College Core: Field 6 (Natural Sciences)

EVST 250 Nature, Culture and Interpretation **3 Credits**

Narratives--stories--are one of the primary tools humans use to shape their understanding of themselves and their environment. Course examines non-fiction, creative non-fiction and fictional narratives to identify origins and elaborations of stories we tell about nature and culture as they impact our relationships to our environments.

Fulfills College Core: Field 5 (Social Sciences)

EVST 259 Environmental History of the United States **3 Credits**

This course examines the evolving relationship between humans and the nonhuman natural world in the United States. Topics include the ecological implications of the arrival of African and European peoples in North America, westward expansion, impacts of industrialization, the industrialization of agriculture, and the development of ecological consciousness.

Fulfills College Core: Field 4 (History)

EVST 275 Global Environmental Problems **3 Credits**

This course examines global environmental policy in relation to structural and historical realities of environmental change. Topics to be discussed include pre and post industrialization and environmental policy, globalization, environmental activism, climate change, and perspectives of international historical roots of policy and change.

Fulfills College Core: Field 5 (Social Sciences)

EVST 498 Internship **1-3 Credits**

Students will have the opportunity to participate in the daily work of an environmental agency or organization. Students assume responsibility for daily work and, upon agreement with the instructor and site supervisor, a reflection journal, a research paper and 120 hours of work on-site.

Prerequisite: permission of chair & associate dean.

EVST 499 Independent Study **1-4 Credits**

Study and work with a faculty supervisor. Project to be determined by faculty agreement. Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

Ethics & Justice Program

Co-Director: Tanya Loughead, PhD, Associate Professor, Philosophy

Co-Director: Philip Reed, PhD, Associate Professor, Philosophy

The contemporary world is fraught with serious challenges to well-being, a world in which poor and marginalized peoples are especially at risk because of their vulnerability to the effects of globalization and climate change, human trafficking, disease and war. We are surrounded by moral disagreements that appear to be incommensurable and irresolvable. Moreover, moral discourse seems to be rooted in pernicious relativism that prevents genuine, sustained, rational and reflective inquiry. To address the pressing concerns of our contemporary world, the community of Jesuit colleges and universities has espoused a special commitment to promote the causes of social justice. In this connection, they are redoubling their efforts to develop academic programs and social activities that cultivate the values of responsible citizenship among their students.

The Department of Philosophy at Canisius College has taken up this cause by developing a curriculum that addresses concerns of social justice. The Department has also developed two interdisciplinary minor programs — one in Ethics, the other in Justice.

These minors help students to participate in careful analysis and to cultivate moral imagination and thereby to enrich their capacities for moral discernment. We want students to advance beyond merely espousing opinions to become enabled to examine their pre-reflective commitments in the context of commitments to truth and the promotion of justice. The overarching objective is to provide students with occasions to enrich their skills to think clearly and thoroughly about matters of ethics and justice.

These minors compliment any major or focus, since the questions we ask are universal questions central to creating a more ethical and just world. Students sometimes find themselves especially drawn to issues of ethics and

justice. These minor programs will enable students to engage in sustained examination to better prepare them to be more effective leaders in our community. The minors are flexible in their requirements, allowing room for students to focus on their particular interests, such as moral or justice concerns relating to the environment, gender issues, or health care, among many others. The Ethics Minor and Justice Minor will serve also to provide credentials for students seeking employment or applying to graduate school.

ADVISEMENT

All students should meet with one of the Ethics & Justice program directors (Loughead or Reed) in choosing their electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences, along with designing the themes and timeline of their theses.

Canisius College offers two minors from this program: a minor in Ethics and a minor in Justice.

- Ethics Minor (p. 143)
- Justice Minor (p. 143)

Ethics Minor

This minor is available to students in any major.

THE ETHICS MINOR REQUIREMENTS

Students are required to complete a total of 16 credit hours, including 20 hours of service learning.

- Foundation course: PHI 241 – offered every year by the Department of Philosophy.
- Four three-credit hour ethics courses from a list of pre-approved elective courses (see below)
- A one-credit hour independent research project including a paper of around 15 pages written in collaboration with a professor who teaches within the Ethics Minor Program.
- 20 hours of a community-based learning experience completing over the course of the minor program.

Ethics Courses

CLS 207	Mythology and Literature	3
PHI 242	Ethical Issues in Business	3
PHI 243	Bio-Medical Ethics	3
PHI 244	Environmental Ethics	3
PHI 245	Animal Ethics	3
PHI 246	Ethics of Technology	3
PHI 252	Happiness, Virtue and the Good Life	3
RST 340	Moral Issues Today	3
RST 342	Theological Ethics and Environmental Justice	3
RST 345	Bio-Moral Problems	3

LEARNING GOALS AND OBJECTIVES

Student Learning Goal 1

Students will demonstrate analysis of and reflection upon concerns of ethics.

Students will:

- **Objective A:** Show competence and expertise in some concerns of ethics.
- **Objective B:** Demonstrate knowledge of the relevant theories of ethics and the ability to critically analyze and reflect on these theories.
- **Objective C:** Understand and reflect on the experience of some concerns of ethics.

Student Learning Goal 2

Students will be able to thoughtfully apply moral principles to cultivate their characters and to work towards realizing a more just world.

Students will:

- **Objective A:** Recognize and analyze some contemporary concerns where ethics is at stake (such as environmental racism, or the abortion debate) and propose thoughtful solutions or approaches to these issues.
- **Objective B:** Engage on a personal level some contemporary concerns where ethics is at stake.

Justice Minor

THE JUSTICE MINOR REQUIREMENTS

Students are required to complete a total of 16 credit hours, including 20 hours of service learning.

- Foundation course: PHI 240 – offered every year by the Department of Philosophy.
- Four three-credit hour justice courses from a list of pre-approved elective courses (see below).
- A one-credit hour independent research project including a paper of around 15 pages written in collaboration with a professor who teaches within the Justice Minor Program.
- 20 hours of a community-based learning experience completing over the course of the minor program.

Justice Courses

CLS 300	Roman Law and Society	3
ENG 319	Special Topics in American Literature	3
HIS 230	The Holocaust in Historical Perspective	3
HIS 347	The History of Marxism	3
MGT 430	Sustainability and Supply Chains	3
PHI 261	Philosophy of Law	3
PHI 267	Catholic Social Thought	3
PHI 271	Philosophy of Human Rights	3
PHI 272	Gender and Philosophy	3
PHI 274	Social and Political Philosophy	3
PSC 241	Human Rights and Globalization	3

PSC 244	War: Causes and Consequences	3
RST 234	Christians (En) Countering Injustice	3
RST 341	Catholic Social Ethics: Theological Perspectives	3
SOC 273	Social Movements and Social Change	3

LEARNING GOALS AND OBJECTIVES

Student Learning Goal 1

Students will demonstrate analysis of and reflection upon concerns of justice.

Students will:

- **Objective A:** Show competence and expertise in some concerns of justice.
- **Objective B:** Demonstrate knowledge of the relevant theories of justice and the ability to critically analyze and reflect on these theories.
- **Objective C:** Understand and reflect on the experience of some concerns of justice.

Student Learning Goal 2

Students will be able to thoughtfully apply moral principles to cultivate their characters and to work towards realizing a more just world.

Students will:

- **Objective A:** Recognize and analyze some contemporary concerns where justice is at stake (such as environmental racism, or the abortion debate) and propose thoughtful solutions or approaches to these issues.
- **Objective B:** Engage on a personal level some contemporary concerns where justice is at stake.

European Studies

Director: John D Occhipinti, PhD

INTRODUCTION

Today's world has been shaped by Europe. In fact, the study of Europe is growing even more important as globalization intensifies and the world becomes increasingly interdependent. Meanwhile, the expanding European Union has emerged as an influential player in international politics and business. What happens in Europe matters for the United States.

European Studies is an interdisciplinary program designed to familiarize students with the politics, history, language and culture of this diverse continent. European Studies must be pursued as part of a double or triple major or as a minor. The major and minors are intended to supplement students' majors in more traditional academic disciplines, as well as to provide a "home" for courses taken while studying abroad in Europe. European Studies helps students build their resumes and "European credentials" when added to majors in international relations, political science, history, foreign language, fine arts, English or international business. The European Studies Program also encourages students to develop fluency in a modern European foreign language and to study abroad in Europe. By guiding students in their course selection and encouraging them to develop valuable skills and experiences, European Studies helps prepare students for graduate school, apply for fellowships, such as the Fulbright Scholarship, and enter careers in international law, business, diplomacy or teaching. For a more detailed description of the program, faculty, facilities, academic

and co-curricular opportunities please go to the European Studies Program website (<https://www.canisius.edu/academics/programs/european-studies>).

QUALIFICATIONS

Students must have another major in a traditional academic discipline. No more than four courses at the 100-level may be counted toward the European Studies major. At least one course in the major must be taught by a member of the History Department, and one must be taught by a member of the Political Science Department.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

In European Studies, all students are advised by the Program Director in addition to the advisor in their other major. It is important to work with both to plan an academic pathway that includes the required co-curricular and study abroad experiences.

DUAL MAJORS

European Studies majors must have a second major in a traditional academic discipline. An unlimited number of courses may be applied to the major from study abroad programs in Europe, the core curriculum, the All-College Honors Program or from a second, third, or fourth major. Most dual major combinations can be completed within the minimum 120 credit hour degree requirement. However, in some cases, additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and program director and the appropriate associate dean.

JEAN MONNET AWARD

Each year, the program honors its best graduating senior, taking into account academic performance, study abroad and co-curricular activity related to Europe.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Select one of the following:

PSC 150	Comparative Government and Politics
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Field 4 course on European history (1 course)

MAJOR ELECTIVES

History and Politics Major Electives (3 courses)	9
European Foreign Language, Literature and Culture Major Electives (4 courses)	12
European Studies Major Electives (2 approved courses from any field)	6
Total Credits	27

MAJOR EXPERIENCES

Majors in European Studies must complete a substantial short- or long-term experience in Europe to be approved by the Program Director. For this, students must complete and submit a reflective journal. An example of an acceptable short-term experience would be EuroSim. Long-term experiences would include one of the college’s study abroad semesters in Europe or an alternative approved by the Program Director. Many courses taken abroad can be applied to the requirements of the major or minor.

Major or minors must also demonstrate proficiency in German, French or Spanish through the 216/217 level, the approved equivalent, or at a lower level of proficiency for other European languages when combined with approved study abroad in a country where that language is spoken.

Courses in a modern European language or those on European literature may be counted toward the language, literature and culture or major elective categories noted above. Latin and Ancient Greek may not be used to fulfill the modern foreign language requirement, but courses in the Classics can be counted in the major. For further details and options, students should consult with their advisor and the Director of the European Studies Program.

ADDITIONAL COURSE CONSIDERATIONS

The variety and sequence of courses for the European Studies major will vary according to the second or third academic major. Students are encouraged to fulfill their fields of study, attributes for the core curriculum and requirements of the All College Honors Program by taking courses on Europe in the social sciences, fine arts and literature, history, religion, philosophy and foreign language.

It is especially important for students to take a course in a European foreign language in their first semester at Canisius College and continue with this language at least through the 216/217 level. Students should also fulfill Field 4 or Honors requirements by taking courses on European history. Students with a strong interest in European politics should take PSC 150 during their first year and PSC 355 (European Union) after that.

Students may participate in an annual international, intercollegiate simulation of the European Union, known as EuroSim, which is related to PSC 355. This program is held in Europe and the United States in alternating years. Additional information is available on the European Studies Program website (<http://www.canisius.edu/euro-studies>).

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman	
Fall	Spring
Select one of the following:	Select one of the following:
FRC 215	FRC 217
GER 215	GER 216
SPA 215	SPA 217
PSC 150	
Sophomore	
Fall	Spring
Foreign Language, Literature and Culture Major Elective	Foreign Language, Literature and Culture Major Elective
History and Politics Major Elective	History and Politics Major Elective
Junior	
Fall	Spring
European Studies Major Elective	History and Politics Major Elective
Senior	
Fall	
European Studies Major Elective	

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Majors will apply knowledge of European government and politics to real world situations.

Students will:

- Objective A: Demonstrate knowledge of important political figures and events in contemporary European politics;
- Objective B: Demonstrate an understanding of key issues in contemporary European politics;
- Objective C: Demonstrate an understanding of how key governmental institutions in Europe function.

Student Learning Goal 2

Majors will communicate at the intermediate level in a Modern European foreign language (comparable to Canisius College course level 216).

Students will:

- Objective A: Speak with fluency and grammatical correctness in the target language;
- Objective B: Understand verbal communication in the target language;
- Objective C: Read a in the target language;
- Objective D: Write in the target language.

Student Learning Goal 3

Majors will apply knowledge of European History to real world situations.

Students will:

- Objective A: Understand how contemporary European society has been shaped and influenced by Europe’s history;
- Objective B: Understand the significance of key European historical figures and events when referred to in contemporary social discourse.

Student Learning Goal 4

Majors will apply knowledge of European language, literature, and culture to real world situations.

Students will:

- Objective A: Recognize the key beliefs, values, norms and cultural artifacts that comprise societal culture in Europe, including its various sub-cultures;
- Objective B: Appreciate the contributions made to Europe's culture by some of its key cultural figures from literature and the fine arts;
- Objective C: Understand the significance of key contributions to European literature and fine arts when references to these contributions are made in contemporary social discourse or everyday life.

Select one of the following:	3
Field 4 course on European history (1 course)	
History and Politics Major Electives (2 courses)	
European Foreign Language, Literature and Culture Major Electives (3 courses)	
PSC 150	Comparative Government and Politics
Total Credits	3

Students must complete the appropriate minor request form.

The requirements for proficiency in a modern European foreign language are the same as for the major. No more than three courses at the 100-level may be counted toward the minor. A maximum of two courses in a modern European foreign language may be counted toward the language, literature or culture category of the minor. Pending approval of the Program Director, courses to be applied to the minor can be taken abroad or as part of other majors, the core curriculum or the All-College Honors Program.

INTERNATIONAL BUSINESS

A special minor has been tailored to the needs and interests of students majoring in International Business. Consult the program director for details.

Fine Arts

Chair: Richard Falkenstein, PhD

The Fine Arts Department provides opportunities for students to obtain a sound knowledge of the visual and performing arts. The department's offerings include a major and a minor in art history, majors and a minor in music, and a minor in studio art. These programs enable students to receive training for professional careers in the areas involved or to explore the arts for their own personal development.

- Art History (p. 150)
- Music (p. 152)
- Music Business (p. 155)
- Music Performance (p. 157)
- Art History Minor (p. 152)
- Music Minor (p. 154)
- Studio Art Minor (p. 159)

Fine Arts - Art History (FAH) (p. 146), Fine Arts - Music (FAM) (p. 152), Fine Arts - Studio Arts (FAS) (p. 150)

FINE ARTS - ART HISTORY (FAH)

FAH 101 Cave Paintings, the Colosseum & Cathedrals 3 Credits
Introduction to visual and cultural analysis of major works of art from prehistory through the Middle Ages. Covers prehistoric through Gothic art.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall, spring, & summer.

FAH 102 Altarpieces, Academies & the Avant-Garde 3 Credits
Introduction to visual and cultural analysis of major works of Western art from the Renaissance through the contemporary moment.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall, spring, & summer.

FAH 103 Survey of Pre-Columbian and Native American Art 3 Credits
The artistic achievements of native peoples from the Americas. Toltec, Maya, and Aztec civilizations of Central America, and culture groups from the Woodlands, Plains, Southwest, and Northwest in North America prior to and after contact with Europe.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: fall.

FAH 107 Introduction to African and Asian Art 3 Credits
Beginning with a discussion about the Silk Road, art of the Asian and African continents and the Pacific Ocean cultures are central topics. This course is an introduction to the history of non-Western art from the emergence of these particular cultures into modern times.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: every fall.

FAH 109 History of Architecture 3 Credits
Visual and cultural analysis of major monuments of global architecture from antiquity to the present.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall.

FAH 110 History of Photography 3 Credits
Introduction to artistic and technical origins and subsequent developments of photographic processes from their invention in 1839 to global contemporary practices.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall.

FAH 159 Gender and Art 3 Credits
Introduction to selected artists in Western culture and analysis of issues involving the relationships among gender, representations of gender, and art in Western culture.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall.

FAH 210 Ancient Egyptian and Near Eastern Art 3 Credits
Introduction to visual and cultural analysis and interpretation of the painting, sculpture, and architecture of ancient Egypt and the ancient Near East.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness, Oral Communication
Offered: spring.

FAH 213 Greek and Roman Art 3 Credits
Visual and cultural analysis of the painting, sculpture, and architecture of Greece and Rome.
Fulfills College Core: Field 3 (Literature and the Arts), Oral Communication
Offered: spring.

- FAH 224 Medieval Art** 3 Credits
Visual analysis, cultural analysis, and interpretation of major works of art and architecture from Early Christian, Byzantine, Islamic, Carolingian, Ottonian, Romanesque, and Gothic periods.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall or spring.
- FAH 245 Renaissance Art** 3 Credits
Visual, cultural, and iconographic analysis of painting, sculpture, architecture, and art theory in Europe from the fourteenth through the sixteenth centuries.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall.
- FAH 248 Baroque Art** 3 Credits
Visual, cultural and iconographic analysis of painting, sculpture and architecture during the 17th and 18th centuries in France, Italy, England, Spain and the Netherlands.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall.
- FAH 261 Monet and the Age of Impressionism** 3 Credits
Visual and cultural analysis of major works from Western Europe and the United States, from the early 19th century through Post-Impressionism.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: spring.
- FAH 262 Modern Art** 3 Credits
Visual and cultural analysis of major works from Western Europe and the United States from the late 19th century through 1945.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: spring.
- FAH 265 Contemporary Art** 3 Credits
Visual and cultural analysis of major works from the United States and Western Europe from 1945 to the present.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: spring.
- FAH 266 Modern Architecture** 3 Credits
Introduction to the architectural history of the modern world, focusing on major works in western architecture from the Industrial Revolution through Post Modernism.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: spring.
- FAH 267 Frank Lloyd Wright** 3 Credits
An introduction to the influential and iconic work of American architect Frank Lloyd Wright. Presents his major works and considers American and Modern architecture as a whole. A visit to the Darwin D. Martin House Complex is a vital component to this course.
Fulfills College Core: Field 3 (Literature and the Arts)
- FAH 271 Art in Buffalo** 3 Credits
Examination of the artistic and historical resources in the Greater Buffalo region, including prominent examples of architecture, museum collections, and artists in Western New York. Course is taught completely online. (Field 3) Summer
Fulfills College Core: Field 3 (Literature and the Arts)
- FAH 350 Topics in Art History** 3 Credits
Varying topics in art. Course will run as a seminar.
Restriction: art history major or minor status or permission of the instructor required.
Fulfills College Core: Advanced Writing-Intensive
Offered: fall.
- FAH 450 Senior Seminar** 3 Credits
For advanced art history students, to tie together experiences in the field and formalize their understanding of the discipline. Explores the history of art history and the status of institutions and professions within the art world.
Prerequisite: junior or senior standing. **Restriction:** art history majors and minors only.
Fulfills College Core: Oral Communication
Offered: fall or spring.
- FAH 460 Museum Internship** 3 Credits
Research, curatorial, and administrative internship at selected Buffalo area art galleries.
Prerequisite: junior or senior standing. **Restriction:** art history majors and minors (or by permission of internship director).
Offered: fall, spring, & summer.
- FAH 481 The Art of the Selfie** 3 Credits
An overview of the artistic expressions of portraiture limited to those identified as self-portraits. Beginning with the earliest known self-portraits onward, we will discuss the roles ascribed to self-portraits by artists, their patrons, and the 21st century connoisseur.
Fulfills College Core: Core Capstone
- FAH 499 Independent Study in Art History** 3 Credits
Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean.

FINE ARTS - MUSIC (FAM)

- FAM 115 Fundamentals of Music** 3 Credits
Basic elements of music as perceived and notated and the styles and forms of music derived from them. Practical theory applications include ear training, keyboard playing, and composition.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: fall, spring & summer.
- FAM 119 Masterpieces of Music** 3 Credits
A survey of Western art music from medieval Gregorian chant to the present, including the study of musical elements, historical background, musical style, and masterworks of various periods.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: fall & spring.
- FAM 123 World Musics** 3 Credits
Survey course, including folk, traditional, and art music of Europe, Asia, Africa, Australia, and North and South America. Classes include listening and videos with the study of instruments, dances, songs, and rhythms of these cultures.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.
- FAM 124 America's Music** 3 Credits
Music made or continuously used by Americans up to the present: sacred congregational music, vernacular music, African-American music, and cultivated traditions. Historical and sociological development of folk, jazz, and popular music as uniquely American.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: spring & summer.

- FAM 126 Music Performance** 1 Credit
Half-hour private lessons designed for all levels of experience are offered in piano, organ, harp, guitar, voice, strings, woodwinds, brass, strings, percussion, and conducting. For music majors, music minors, education majors with a music concentration, and music scholarship winners (no fee).
Prerequisite: permission of department chair; limited to music majors, music minors, music scholarship students, & music education students with a concentration in music.
- FAM 171 Chorale** 0 Credits
A mixed-voice singing group that performs repertoire in both the classical and popular styles (Same as FAM 181 except for 0 credit).
Offered: fall & spring.
- FAM 172 Jazz Ensemble** 0 Credits
Jazz ensemble that plays a wide range of music from Count Basie to Maynard Ferguson and everything in between (Same as FAM 182 except for 0 credit).
Offered: fall & spring.
- FAM 174 Chamber Orchestra** 0 Credits
Chamber orchestra that performs a wide range of orchestral literature from the Baroque period through the 20th century. Concert programs provide students with wide experiences in the orchestral arts (Same as FAM 184 except for 0 credit).
Offered: fall & spring.
- FAM 175 Concert Band** 0 Credits
Campus-wide instrumental ensemble performing a wide variety of standard concert band literature (Same as FAM 185 except for 0 credit).
Offered: fall & spring.
- FAM 181 Chorale** 1 Credit
A mixed-voice singing group that performs repertoire in both the classical and popular styles (Same as FAM 171 except for 1 credit).
Offered: fall & spring.
- FAM 182 Jazz Ensemble** 1 Credit
Jazz ensemble that plays a wide range of music from Count Basie to Maynard Ferguson and everything in between (Same as FAM 172 except for 1 credit).
Offered: fall & spring.
- FAM 184 Chamber Orchestra** 1 Credit
Chamber orchestra that performs a wide range of orchestral literature from the Baroque period through the 20th century. Concert programs provide students with wide experiences in the orchestral arts. (Same as FAM 174 except for 1 credit).
Offered: fall & spring.
- FAM 185 Concert Band** 1 Credit
Campus-wide instrumental ensemble performing a wide variety of standard concert band literature (Same as FAM 175 except for 1 credit).
Offered: fall & spring.
- FAM 210 Keyboard Musicianship** 3 Credits
Class instruction in practical keyboard applications including basic keyboard proficiency, harmonization of folk melodies and songs, and sight-reading.
Prerequisite: permission of instructor or department chair.
Offered: occasionally.
- FAM 212 Canisius and the BPO Experience** 3 Credits
Classes meet at both Canisius College and Kleinhans Music Hall as students study music on stage, behind the scenes, and in the orchestral repertory with Canisius College faculty, BPO conductors, soloists, and managers.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.
- FAM 213 Women in Music** 3 Credits
Roles of women composers and performers in art music from the time of ancient Greece through the present as they struggle to break the confines of traditional gender roles to gain equal representation and recognition.
Fulfills College Core: Diversity, Field 3 (Literature and the Arts)
Offered: occasionally.
- FAM 214 Music in Film** 3 Credits
Functions of music in silent film, in animation, and during the golden age of American cinema as an extension of European musical practices through the rise of the Hollywood studio system.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.
- FAM 216 Medieval and Renaissance Music** 3 Credits
Traces Western art music from its origins in Gregorian chant through the development and refinement of more complex compositions such as the mass setting and motet.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.
- FAM 217 Music of the Baroque Period** 3 Credits
A study of Western art music of the Baroque period (1600-1750) beginning with the early operatic works of Monteverdi and concluding with the mature masterpieces of Bach and Handel. Many different instrumental and vocal genres are covered in this course, including concerto, sonata, suite, opera, cantata, and oratorio.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.
- FAM 218 Music of the Classical Period** 3 Credits
A study of European art music c.1750-1809 and the historical and cultural forces that helped to shape it. Focus on the lives and works of Haydn, Mozart, Beethoven, their contemporaries, and immediate predecessors.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.
- FAM 219 19th Century Music** 3 Credits
Great composers of the Romantic period, including their lives, selected works, musical style, and influence.
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness
Offered: occasionally.
- FAM 220 Art Music from 1900 to the Present** 3 Credits
Covers impressionism in music, which ushers in the twentieth century, European music 1910-1945, American music, and new music since 1945.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.
- FAM 221 Opera Workshop I** 3 Credits
The study and performance of scenes from operatic literature, including stage movement, acting, and historical background of operas. Perfect for students who enjoy singing and acting.
Prerequisite: permission of instructor.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.
- FAM 222 Opera Workshop II** 3 Credits
The study and performance of scenes from operatic literature, including stage movement, acting, and historical background of operas. Perfect for students who enjoy singing and acting.
Prerequisite: permission of instructor.
Fulfills College Core: Field 3 (Literature and the Arts)
Offered: occasionally.

FAM 224 Afro-Centric Music	3 Credits	FAM 340 Music Theory IV	3 Credits
Music of West Africa and how, due to the African Diaspora, this music has come to influence both art and pop music on a worldwide basis.		Musical styles, forms, and techniques of the 20th century, including impressionism, atonality, serialism, minimalism, and electronic applications. Study of selected works by Debussy, Ravel, Stravinsky, Schoenberg, Messiaen, Boulez, Glass, and Varese. Lab required.	
Fulfills College Core: Field 3 (Literature and the Arts), Global Awareness		Prerequisite: FAM 330. Corequisite: FAM 340L.	
Offered: occasionally.		Offered: spring.	
FAM 226 Music Performance	2 Credits	FAM 340L Music Theory IV Lab	1 Credit
Half-hour private lessons designed for all levels of experience are offered in piano, organ, harp, guitar, voice, strings, woodwinds, brass, strings, percussion, and conducting. For music majors, music minors, education majors with a music concentration, and music scholarship winners (no fee).		Advanced lab instruction in sight-singing and ear-training.	
FAM 230 Music Theory I	3 Credits	Corequisite: FAM 340.	
A study of diatonic harmonic progressions typical in the music of the 18th and 19th centuries. The course includes the analysis of melodic, harmonic, rhythmic, and formal aspects of music by composers such as Bach, Mozart, Beethoven, and Schubert. Lab required. J2171.		Offered: spring.	
Prerequisite: FAM 115 or permission of instructor. Corequisite: FAM 230L.		FAM 350 Basic Conducting	3 Credits
Fulfills College Core: Field 3 (Literature and the Arts)		Development of students' basic conducting skills of beat, pattern and gesture, leadership of musical activities, and musicianship including applied ear training and score analysis.	
Offered: fall.		Offered: occasionally.	
FAM 230L Music Theory I Lab	1 Credit	FAM 360 Music Business I	3 Credits
Weekly lab instruction in sight-singing and ear-training. Development of aural skills in melodic, harmonic, and rhythmic dictation.		An overview of the many aspects of the music industry, including arts management, administration, promotion, marketing, financing through grant proposals, and legal issues as they apply to opportunities in a not-for-profit music business career.	
Corequisite: FAM 230.		Offered: occasionally.	
Offered: fall.		FAM 361 Music Business II	3 Credits
FAM 240 Music Theory II	3 Credits	Comprehensive discussion of artist management, promotion, marketing, contract negotiation, copyright and licensing laws, contract law and negotiation, media and public relations related to music business, and the role of agent/manager in the recording industry.	
A study of four-part composing as developed in Europe, particularly tonal music associated with Bach, Mozart, and Beethoven. Lab required.		Offered: occasionally.	
Prerequisite: FAM 230 or permission of instructor. Corequisite: FAM 240L.		FAM 390 Sounding Society	3 Credits
Offered: spring.		Explores how music represents, instills, and challenges the values of ethics, justice, diversity, and global awareness in different societies as represented in art music as well as in popular and indigenous music.	
FAM 240L Music Theory II Lab	1 Credit	Fulfills College Core: Core Capstone	
Weekly lab instruction in sight-singing and ear-training. Development of aural skills in melodic, harmonic, and rhythmic dictation.		Offered: spring.	
Corequisite: FAM 240.		FAM 450 Senior Seminar	3 Credits
Offered: spring.		An integration of the diverse areas of music into a coherent whole. Course includes supervised research culminating in a senior project.	
FAM 250 Music for Children	3 Credits	Restriction: music majors or permission of the instructor.	
Course provides the backgrounds, models, and skills necessary to create musical experiences for the pre-school and elementary-age child.		Fulfills College Core: Oral Communication	
Offered: occasionally.		Offered: occasionally.	
FAM 255 Diction for Singers	3 Credits	FAM 498 Internship	3 Credits
The study of correct pronunciation for singing in English and foreign languages using the International Phonetic Alphabet.		An internship with a business or organization related to the student's primary interest gives hands-on experience in the field. A variety of settings are possible: music or arts management, recording studio, radio station, and music retail. Internships require an application and approval by the associate dean.	
Fulfills College Core: Field 3 (Literature and the Arts)		Prerequisite: FAM 360 & FAM 361 or permission of department chair.	
Offered: occasionally.		Offered: occasionally.	
FAM 330 Music Theory III	3 Credits	FAM 499 Independent Study in Music	1-3 Credits
19th-century styles and analysis of chromatic harmony with the study of works by Beethoven, Schubert, Franck, Wagner, and Mahler. Focus on counterpoint skills. Lab required.		Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.	
Prerequisite: FAM 240. Corequisite: FAM 330L.		Prerequisite: permission of the instructor, department chair, & associate dean.	
Offered: fall.		Offered: occasionally.	
FAM 330L Music Theory III Lab	1 Credit		
Weekly lab instruction in sight-singing and ear-training. Development of aural skills in melodic, harmonic, and rhythmic dictation.			
Corequisite: FAM 330.			
Offered: fall.			

FINE ARTS - STUDIO ARTS (FAS)

FAS 110 Two-Dimensional Design 3 Credits

Investigation of the formal elements and principles of design in two dimensions. Hands-on studio environment with computer-based assignments will involve students in practical and creative solutions to design problems.

Fulfills College Core: Field 3 (Literature and the Arts)

Offered: fall, spring & summer.

FAS 120 Drawing I 3 Credits

Investigation of the formal, material, and historical fundamentals of drawing. Exercises with dry and wet media progress through perceptual rendering, collage, narrative, and imaginative drawing.

Fulfills College Core: Field 3 (Literature and the Arts)

Offered: fall, spring & summer.

FAS 130 Three-Dimensional Design 3 Credits

Investigation of the formal elements and principles of design in three dimensions and their relationship with the space they occupy. Particular emphasis is placed on material and presentation.

Fulfills College Core: Field 3 (Literature and the Arts)

Offered: fall & summer.

FAS 131 Sculpture I 3 Credits

Emphasis on traditional techniques. Assignments cover specific materials (plaster, wood, styrofoam, metal, paper) and particular techniques (armature construction, wood working, riveting, and mold making).

Fulfills College Core: Field 3 (Literature and the Arts)

Offered: spring.

FAS 140 Introduction to Still Photography 3 Credits

Basic techniques of photography explored through the use of 35mm cameras and film. Emphasis on the development of black and white film and the visualization process of taking pictures.

Restriction: must have 35mm camera with manual controls.

Fulfills College Core: Field 3 (Literature and the Arts)

Offered: occasionally.

FAS 141 Digital Photography 3 Credits

Review basic photo skills as they relate to the operation of digital cameras. Students are introduced to the digital workflow using Photoshop to develop a personal style that is reflected in a printed and digital portfolio. No prior photo experience necessary.

Restriction: must have a D-SLR camera (digital single lens reflex camera).

Fulfills College Core: Field 3 (Literature and the Arts)

Offered: fall, spring & summer; online.

FAS 150 Color 3 Credits

Combines in-depth color theory with design and composition making learned through traditional studio set-ups and contemporary computer applications.

Fulfills College Core: Field 3 (Literature and the Arts)

Offered: occasionally.

FAS 160 Printmaking I 3 Credits

Introduction to the history and processes of basic printmaking, including relief printing, monoprints, pronto plate lithography, "image-on" intaglio, and other photo-sensitive and non-toxic processes.

Prerequisite: FAS 120 or permission of instructor.

Fulfills College Core: Field 3 (Literature and the Arts)

Offered: occasionally.

FAS 170 Studio Painting I 3 Credits

Investigation of the formal, material, and historical fundamentals of painting. Exercises in watercolor and acrylic paint progress through grisaille, monochromatic, limited palette, and full palette treatments of subject matters.

Fulfills College Core: Field 3 (Literature and the Arts)

Offered: occasionally.

FAS 222 Figure Drawing I 3 Credits

In-depth work with human figure as primary subject matter. Students work from model for half the semester. Emphasis on anatomical structures and expressive use of figure in composition making. Work in a range of media. Students also work on independent personal projects using figure.

Prerequisite: FAS 170.

Fulfills College Core: Field 3 (Literature and the Arts)

Offered: occasionally.

FAS 250 Studio Art Capstone 3 Credits

Studio art minor will culminate in a final project devised by each student individually to be presented as a portfolio or gallery exhibit. Critique will be a major focus, through presentation and written evaluation of peer work. Students will develop a project of their own choice based on individual necessity and be largely self-directed.

Prerequisite: FAS 110, FAS 120, FAS 130, & permission of instructor.

Restriction: must be a studio art minor nearing graduation.

Offered: occasionally.

FAS 260 Printmaking II 3 Credits

A continuation of printmaking processes learned in Printmaking I. Students experience a more self-guided studio environment where they are expected to build upon the techniques and processes learned in Printmaking I and expand on them in the form of practice and experimentation. Personal style and conceptual direction begin to develop alongside process.

Prerequisite: FAS 160.

Offered: occasionally.

FAS 496 Internship 3 Credits

Internships require an application and approval by the chair and the associate dean.

Prerequisite: permission of the chair & associate dean.

Offered: occasionally.

Art History

INTRODUCTION

A more detailed description of the program, faculty, facilities, academic, and co-curricular opportunities can be found at the Art History website (<https://www.canisius.edu/academics/programs/art-history>).

QUALIFICATIONS

There is no minimum grade requirement in the major, but students must have a cumulative 2.0 in order to graduate with a degree in art history.

MAJOR EXPERIENCE

Many students take the opportunity to gain practical experience in an art institution through the Museum Internship course. Art history majors and minors have interned at the Albright-Knox Art Gallery, the Darwin Martin House, the Roycroft Campus, the Buffalo Central Terminal Restoration Corporation, Hallwalls, the Castellani Art Museum, CEPA, WNYBAC, and Big Orbit Gallery.

ADDITIONAL COURSE CONSIDERATIONS

All art history students are strongly encouraged to take courses in a foreign language since jobs and graduate programs in the field often require some familiarity with languages. Students interested in studying abroad are strongly encouraged to pursue two years of foreign language study in advance of their time abroad.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

FAH 101	Cave Paintings, the Colosseum & Cathedrals	3
FAH 102	Altarpieces, Academies & the Avant-Garde	3
Ancient and/or medieval art: one course		3

Renaissance and/or Baroque art: one course		3
Art since 1800: one course		3
Non-Western or non-period based topic: one course		3
One 300-level art history course		3
FAH 450	Senior Seminar	3
Total Credits		24

MAJOR ELECTIVES

In addition to the above, majors complete four art history courses as electives (12 credits); dual majors complete two art history electives (6 credits). In addition to FAH courses, the following may be used as electives:

COM 374	Film History	3
COM 375	Film Classics	3
COM 376	Film Genres	3
COM 479	World Cinema	3
FAS 110	Two-Dimensional Design	3
FAS 120	Drawing I	3
FAS 130	Three-Dimensional Design	3
FAS 150	Color	3
PHI 291	Philosophy of Art	3
RST 314	New Testament in Literature and Art	3

Other studio art courses will be considered upon approval of the department chair and the course instructor. A student may apply a maximum of two of these extra-departmental courses as electives to the art history major, one course if the student has a second major.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
FAH 101	FAH 102

Sophomore

Fall	Spring
Course in Renaissance and/or Baroque art	Course in ancient and/or medieval art
Art history elective	Art history elective

Junior

Fall	Spring
Non-Western or non-period based art history course ¹	Course in art since 1800 ¹
Museum Internship or art history elective	Art history elective

Senior

Fall	Spring
300-level art history course ¹	Senior Seminar ¹

¹ 300-level art history courses and Senior Seminar are offered infrequently. Students therefore might need to take these courses in their junior year and take their non-Western or non-period based art history course and a course in art since 1800 in their senior year.

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Art History Majors will develop and refine the skills needed to understand and analyze works of art.

Students will:

- **Objective A:** Describe and interpret works of art using terminology specific to the field and to carry out an analysis of a work of art;
- **Objective B:** Find and analyze information on works of art, artists, periods, and art historical topics using written materials and databases specific to the field;
- **Objective C:** Communicate orally in the conventions appropriate to the field;
- **Objective D:** Communicate in writing in the conventions appropriate to the field.

Student Learning Goal 2

Art History Majors will understand how works of art are embedded in and reflective of specific cultural-historical contexts.

Students will:

- **Objective A:** Locate works of art within larger historical contexts;
- **Objective B:** Articulate the interrelationships between art and a range of cultures;
- **Objective C:** Analyze the importance of the visual arts in societies past and present.

ART HISTORY MINOR

The minor in art history requires six courses, some of which may also fulfill requirements in the core curriculum or the student's major.

Requirements for the Art History Minor

FAH 101	Cave Paintings, the Colosseum & Cathedrals	3
FAH 102	Altarpieces, Academies & the Avant-Garde	3
Ancient and/or medieval art: one course		3
Renaissance and/or Baroque art: one course		3
Art since 1800: one course		3
FAH 450	Senior Seminar	3
Total Credits		18

Music

INTRODUCTION

The study of music develops and enhances analytical, creative, listening, and performing skills. Music majors choose a concentration in one of four sequences: music history and literature, music education, music technology, or music business (the sequence in music performance and the music major with a music business concentration curricula are described in separate catalog entries). Performance, both individual and ensemble, is an integral part of the Music Program: students may perform in the Chorale, Chamber Orchestra, Concert Band, Jazz Ensemble, and other ensembles; there also are many other opportunities for student performance. As an adjunct to the Music Program, the ArtsCanisius cultural series features concerts by faculty and guest artists that range from classical music to jazz. Students who would like to study music, but not as a major, may combine a music minor with another discipline or may choose the music concentration offered in the Early Childhood and Childhood Education Programs.

A more detailed description of the faculty, facilities, academic, and co-curricular opportunities can be found at the Music Program website (<https://www.canisius.edu/academics/programs/music>).

QUALIFICATIONS

A vocal or instrumental performance audition is required prior to formal acceptance into the major, but students may begin to take courses before the audition takes place (usually no later than the end of first academic year). In order to successfully complete the major, students must have a minimum grade of C- in each course included in the major. Students also must maintain a 2.0 overall average to graduate with a degree in music.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Some common dual majors with music are with communications, digital media arts, English, psychology, and education.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Music majors complete required courses and electives, participate in ensemble for eight semesters, and fulfill one of the sequences listed below (the requirements for the performance sequence and the music major with a music business concentration are described in separate catalog entries).

Required Courses

FAM 119	Masterpieces of Music	3
FAM 210	Keyboard Musicianship	3
FAM 230 & 230L	Music Theory I and Music Theory I Lab	4
FAM 240 & 240L	Music Theory II and Music Theory II Lab	4
FAM 330 & 330L	Music Theory III and Music Theory III Lab	4
FAM 340 & 340L	Music Theory IV and Music Theory IV Lab	4
FAM 450	Senior Seminar	3
Must take four semesters of performance		8
FAM 226	Music Performance (four semesters)	
FAM Music History Course Elective		
Select one of the following:		3
FAM 216	Medieval and Renaissance Music	
FAM 217	Music of the Baroque Period	
FAM 218	Music of the Classical Period	
FAM 219	19th Century Music	
FAM 220	Art Music from 1900 to the Present	
Total Credits		36

Music Ensemble

Majors must take the same ensemble for all eight semesters.

A student may take a music ensemble for one (1) credit

FAM 181	Chorale	1
FAM 182	Jazz Ensemble	1
FAM 184	Chamber Orchestra	1
FAM 185	Concert Band	1

or for zero (0) credit

FAM 171	Chorale	0
FAM 172	Jazz Ensemble	0
FAM 174	Chamber Orchestra	0
FAM 175	Concert Band	0

Students may opt for zero credit to avoid exceeding 18 credits in a semester.

Music Sequences

Students choose one of the following sequences (the performance sequence and music major with a music business concentration are listed separately).

History and Literature Sequence

Three additional music history courses (see list of music history courses below). Students following the history and literature sequence are strongly urged to take at least two semesters of French, German, or Italian.

Music Technology Sequence

DMA 309	Music Technology	3
DMA 310	Digital Audio/Music Production	3
One music elective course		3
Total Credits		9

Music Education Sequence

FAM 250	Music for Children	3
FAM 350	Basic Conducting	3
One music elective course		3
Total Credits		9

Music Business Sequence

FAM 360	Music Business I	3
FAM 361	Music Business II	3
DMA 309	Music Technology	3
or DMA 310	Digital Audio/Music Production	
Total Credits		9

Note: DMA 309 and DMA 310 are offered in alternate years.

MUSIC HISTORY COURSES AND MUSIC ELECTIVE COURSES

Music history courses include the following:

FAM 216	Medieval and Renaissance Music	3
FAM 217	Music of the Baroque Period	3
FAM 218	Music of the Classical Period	3
FAM 219	19th Century Music	3
FAM 220	Art Music from 1900 to the Present	3

Music elective courses can be chosen from the following:

FAM 123	World Musics	3
FAM 124	America's Music	3
FAM 212	Canisius and the BPO Experience	3
FAM 213	Women in Music	3
FAM 214	Music in Film	3
FAM 216	Medieval and Renaissance Music	3
FAM 217	Music of the Baroque Period	3
FAM 218	Music of the Classical Period	3
FAM 219	19th Century Music	3
FAM 220	Art Music from 1900 to the Present	3
FAM 221	Opera Workshop I	3
FAM 222	Opera Workshop II	3
FAM 224	Afro-Centric Music	3
FAM 255	Diction for Singers	3
FAM 360	Music Business I	3
FAM 361	Music Business II	3
DMA 309	Music Technology	3
DMA 310	Digital Audio/Music Production	3
HON 323	Opera	3
HON 324	The Symphony	3

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
FAM 119	FAM 240 & 240L
FAM 230 & 230L	Music history course
FAM 226	FAM 226
Music ensemble	Music ensemble

Sophomore

Fall	Spring
FAM 330 & 330L	FAM 340 & 340L
FAM 210	Music sequence course
FAM 226	FAM 226
Music ensemble	Music ensemble

Junior

Fall	Spring
Music sequence course	Music sequence course
Music ensemble	Music ensemble

Senior

Fall	Spring
FAM 450	Music ensemble
Music ensemble	

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Music majors will be able to analyze the musical elements of a piece of music.

Students will:

- **Objective A:** Identify the elements of melody, rhythm, harmony, organizational patterns, and form in Western art music through aural analysis of recordings;
- **Objective B:** Identify the elements of melody, rhythm, harmony, organizational patterns, and form in Western art music through visual analysis of musical scores.

Student Learning Goal 2

Music majors will be able to demonstrate proficiency in vocal or instrumental performance.

Students will:

- **Objective A:** Demonstrate the technical and interpretive skills necessary for artistic self-expression in a variety of repertory through solo performance in the student's primary area of vocal or instrumental performance;
- **Objective B:** Demonstrate the technical and interpretive skills necessary for artistic self-expression in a variety of repertory through ensemble performance in the student's primary area of vocal or instrumental performance.

Student Learning Goal 3

Music majors will be able to analyze the musical style of a piece of music.

Students will:

- **Objective A:** Identify aurally the musical period or culture of a piece of music;
- **Objective B:** Identify the musical period or culture of a piece of music through score reading.

Student Learning Goal 4

Music majors will be able to integrate knowledge in music theory, music history, and performance appropriate to the individual's sequence of study.

Students will:

- **Objective A:** Exhibit the integration of musical knowledge through the presentation of a written paper or a musical performance. Fine Arts Music Major

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. Students must complete the appropriate minor request form.

Music Minor

The music minor enables students majoring in other academic departments to complement their studies with the study of music. The 18-credit program includes courses in theory and music history and can include music performance.

FAM 115	Fundamentals of Music ¹	3
FAM 119	Masterpieces of Music	3
Select two of the following:		6
FAM 123	World Musics	
FAM 124	America's Music	
FAM 212	Canisius and the BPO Experience	
FAM 213	Women in Music	
FAM 214	Music in Film	
FAM 216	Medieval and Renaissance Music	
FAM 217	Music of the Baroque Period	
FAM 218	Music of the Classical Period	
FAM 219	19th Century Music	
FAM 220	Art Music from 1900 to the Present	
FAM 221	Opera Workshop I	
or FAM 222	Opera Workshop II	
FAM 224	Afro-Centric Music	
Select 6 credits from the following:		6
Any combination of FAM courses, music ensembles and music lessons		
DMA 309	Music Technology ²	
DMA 310	Digital Audio/Music Production ²	
HON 323	Opera	
HON 324	The Symphony	

Total Credits

18

- ¹ If the student has sufficient theory background as demonstrated by a placement test, another FAM theory course may be substituted for FAM 115.
- ² **Note:** DMA 309 and DMA 310 are offered in alternate years.

Music Business

INTRODUCTION

The music major with a music business concentration is an interdisciplinary opportunity for students to combine their passion for music with the marketing and business components of the music industry, all within the liberal arts tradition of the college. The concentration is a joint collaboration between the College of Arts and Sciences and the Wehle School of Business, combining the Bachelor of Arts degree music major and the business minor with the addition of select music business courses and a music business internship.

A more detailed description of the Music Program, faculty, facilities, academic and co-curricular opportunities can be found at the Music Program website (<https://www.canisius.edu/academics/programs/music>).

QUALIFICATIONS

A vocal or instrumental performance audition is required prior to formal acceptance into the major, but students may begin to take courses before the audition takes place (usually no later than the end of the first academic year). In order to successfully complete the major, students must have a minimum grade of C- in each course included in the major. Students must maintain a 2.0 overall average to graduate with a degree in music.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Some common dual majors with music are communications, digital media arts, English, psychology, and education.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally

range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Majors complete required music courses and electives, participate in ensemble for eight semesters, complete the required business concentration courses and elective, and participate in a music business internship.

Required Courses

FAM 119	Masterpieces of Music	3
FAM 210	Keyboard Musicianship	3
FAM 230 & 230L	Music Theory I and Music Theory I Lab	4
FAM 240 & 240L	Music Theory II and Music Theory II Lab	4
FAM 330 & 330L	Music Theory III and Music Theory III Lab	4
FAM 340 & 340L	Music Theory IV and Music Theory IV Lab	4
FAM 360	Music Business I	3
FAM 361	Music Business II	3
FAM 450	Senior Seminar	3
FAM 498	Internship	3
Must take four semesters of performance		8
FAM 226	Music Performance (four semesters)	

FAM Music History Course Elective

Select one of the following:		3
FAM 216	Medieval and Renaissance Music	
FAM 217	Music of the Baroque Period	
FAM 218	Music of the Classical Period	
FAM 219	19th Century Music	
FAM 220	Art Music from 1900 to the Present	

DMA Course Elective

DMA 309 or DMA 310	Music Technology ¹ or Digital Audio/Music Production	3
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Total Credits 48

¹ **Note:** DMA 309 and DMA 310 are offered in alternate years.

Music Ensemble (0-8 credits)

Majors must take the same ensemble for all eight semesters.

A student may take a music ensemble for one (1) credit

FAM 181	Chorale	1
FAM 182	Jazz Ensemble	1
FAM 184	Chamber Orchestra	1
FAM 185	Concert Band	1

or for zero (0) credit

FAM 171	Chorale	0
FAM 172	Jazz Ensemble	0
FAM 174	Chamber Orchestra	0
FAM 175	Concert Band	0

Students may opt for zero credit to avoid exceeding 18 credits in a semester.

Required Business Courses

ECO 101	Principles of Macroeconomics	3
ACC 201	Financial Accounting	3
ECO 255	Business Statistics I	3
MGT 101	Introduction to Management	3
MKT 201	Principles of Marketing	3
FIN 201	Introduction to Finance	3
Total Credits		18

Business Elective

Select one of the following: 3

ECO 102	Principles of Microeconomics
MGT 360	Organizational Behavior
MGT 364	Human Resources Management
MKT 320	Consumer Behavior

MAJOR EXPERIENCE

Internship (FAM 498): The program requires an internship with a business or organization related to the student's primary interest, which gives the student hands-on experience in the field. A variety of settings are possible including music or arts management, recording studios, radio stations, and music retailing. Prerequisites: FAM 360 and FAM 361 or permission of the department chair.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
FAM 230 & 230L	FAM 119
FAM 226	FAM 240 & 240L
Music ensemble	FAM 226
ECO 101	Music ensemble
	MGT 101

Sophomore

Fall	Spring
FAM 330 & 330L	FAM 340 & 340L
FAM 210	Music history course
FAM 226	FAM 226
Music ensemble	Music ensemble
ACC 201	MKT 201

Junior

Fall	Spring
FAM 360	FAM 361
Music ensemble	Music ensemble
ECO 255	DMA 309 or 310 ¹
	FIN 201

Senior

Fall	Spring
FAM 450	FAM 498
Music ensemble	Music ensemble
Business elective	

¹ Note: DMA 309 and DMA 310 are offered in alternate years.

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Music majors will be able to analyze the musical elements of a piece of music.

Students will:

- **Objective A:** Identify the elements of melody, rhythm, harmony, organizational patterns, and form in Western art music through aural analysis of recordings;
- **Objective B:** Identify the elements of melody, rhythm, harmony, organizational patterns, and form in Western art music through visual analysis of musical scores.

Student Learning Goal 2

Music majors will be able to demonstrate proficiency in vocal or instrumental performance.

Students will:

- **Objective A:** Demonstrate the technical and interpretive skills necessary for artistic self-expression in a variety of repertory through solo performance in the student's primary area of vocal or instrumental performance;
- **Objective B:** Demonstrate the technical and interpretive skills necessary for artistic self-expression in a variety of repertory through ensemble performance in the student's primary area of vocal or instrumental performance.

Student Learning Goal 3

Music majors will be able to analyze the musical style of a piece of music.

Students will:

- **Objective A:** Identify aurally the musical period or culture of a piece of music;
- **Objective B:** Identify the musical period or culture of a piece of music through score reading.

Student Learning Goal 4

Music majors will be able to integrate knowledge in music theory, music history, and performance appropriate to the individual's sequence of study.

Students will:

- **Objective A:** Exhibit the integration of musical knowledge through the presentation of a written paper or a musical performance. Fine Arts Music Major

Music Performance

INTRODUCTION

The requirements for the music performance sequence include extensive study of voice or an instrument with the performing faculty, many of whom are members of the Buffalo Philharmonic Orchestra. Students present two formal concerts to fulfill program requirements, one in the junior year and the other in the senior year (see below), in addition to regular participation in student recitals and ensembles. A more detailed description of the faculty, facilities, academic and co-curricular opportunities can be found at the Music Program website (<https://www.canisius.edu/academics/programs/music>).

QUALIFICATIONS

A vocal or instrumental performance audition is required prior to formal acceptance into the major, but students may begin to take courses before the audition takes place (usually no later than the end of the first academic year). In order to successfully complete the major, students must have a minimum grade of C- in each course included in the major. Students must maintain a 2.0 overall average to graduate with a degree in music.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Some common dual majors with music are communications, digital media arts, English, psychology, and education.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally

range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Music majors complete required courses and electives, participate in ensemble for eight semesters, and perform junior and senior recitals.

Required Courses

FAM 119	Masterpieces of Music	3
FAM 210	Keyboard Musicianship	3
FAM 230 & 230L	Music Theory I and Music Theory I Lab	4
FAM 240 & 240L	Music Theory II and Music Theory II Lab	4
FAM 330 & 330L	Music Theory III and Music Theory III Lab	4
FAM 340 & 340L	Music Theory IV and Music Theory IV Lab	4
FAM 450	Senior Seminar	3
Must take eight semesters of performance		16
FAM 226	Music Performance	
FAM Music History Course Elective		
Select one of the following:		3
FAM 216	Medieval and Renaissance Music	
FAM 217	Music of the Baroque Period	
FAM 218	Music of the Classical Period	
FAM 219	19th Century Music	
FAM 220	Art Music from 1900 to the Present	
Total Credits		44

Music Ensemble (0-8 credits)

Majors must take the same ensemble for all eight semesters.

A student may take a music ensemble for one (1) credit

FAM 181	Chorale	1
FAM 182	Jazz Ensemble	1
FAM 184	Chamber Orchestra	1
FAM 185	Concert Band	1

or for zero (0) credit

FAM 171	Chorale	0
FAM 172	Jazz Ensemble	0
FAM 174	Chamber Orchestra	0
FAM 175	Concert Band	0

Students may opt for zero credit to avoid exceeding 18 credits in a semester.

Music Elective

Select one of the following: 3

FAM 123	World Musics
FAM 124	America's Music
FAM 212	Canisius and the BPO Experience
FAM 213	Women in Music
FAM 214	Music in Film
FAM 216	Medieval and Renaissance Music
FAM 217	Music of the Baroque Period
FAM 218	Music of the Classical Period
FAM 219	19th Century Music
FAM 220	Art Music from 1900 to the Present
FAM 221	Opera Workshop I
FAM 222	Opera Workshop II
FAM 224	Afro-Centric Music
FAM 255	Diction for Singers
FAM 360	Music Business I
FAM 361	Music Business II
FAM 498	Internship
FAM 499	Independent Study in Music
DMA 309	Music Technology
DMA 310	Digital Audio/Music Production
HON 323	Opera
HON 324	The Symphony

MAJOR EXPERIENCES

Students in Music Performance present two recitals to complete the requirements for the degree: a junior year recital (25-30 minutes of music) and a senior recital (50-60 minutes with intermission).

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
FAM 119	FAM 240 & 240L
FAM 230 & 230L	Music history course
FAM 226	FAM 226
Music ensemble	Music ensemble

Sophomore

Fall	Spring
FAM 330 & 330L	FAM 340 & 340L
FAM 210	FAM 226

FAM 226	Music ensemble
Music ensemble	
Junior	
Fall	Spring
Music elective	FAM 226
FAM 226	Music ensemble
Music ensemble	
Senior	
Fall	Spring
FAM 226	FAM 226
FAM 450	Music ensemble
Music ensemble	

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Music majors will be able to analyze the musical elements of a piece of music.

Students will:

- **Objective A:** Identify the elements of melody, rhythm, harmony, organizational patterns, and form in Western art music through aural analysis of recordings;
- **Objective B:** Identify the elements of melody, rhythm, harmony, organizational patterns, and form in Western art music through visual analysis of musical scores.

Student Learning Goal 2

Music majors will be able to demonstrate proficiency in vocal or instrumental performance.

Students will:

- **Objective A:** Demonstrate the technical and interpretive skills necessary for artistic self-expression in a variety of repertory through solo performance in the student's primary area of vocal or instrumental performance;
- **Objective B:** Demonstrate the technical and interpretive skills necessary for artistic self-expression in a variety of repertory through ensemble performance in the student's primary area of vocal or instrumental performance.

Student Learning Goal 3

Music majors will be able to analyze the musical style of a piece of music.

Students will:

- **Objective A:** Identify aurally the musical period or culture of a piece of music;
- **Objective B:** Identify the musical period or culture of a piece of music through score reading.

Student Learning Goal 4

Music majors will be able to integrate knowledge in music theory, music history, and performance appropriate to the individual's sequence of study.

Students will:

- **Objective A:** Exhibit the integration of musical knowledge through the presentation of a written paper or a musical performance. Fine Arts Music Major

Studio Art Minor

INTRODUCTION

Canisius College offers a minor in studio art, and classes are open to all students. Studio art courses introduce fundamentals in both technique and artistic conceptualization. The program is intended to provide students with an opportunity to explore options in studio art and to prepare students interested in art as a profession for further undergraduate study at an art school or in a major degree program.

Students also have the opportunity to hear lectures by contemporary artists on and off campus and to visit art exhibits at local galleries and museums; they also are encouraged to attend seminars and workshops at local art venues that introduce them to recent trends in contemporary art. Viewing, critiquing, and writing about art give students a solid grounding for confidently and articulately speaking and writing about their own work and that of their peers.

Students are encouraged to exhibit their work both on and off campus in special events, such as Ignatian Scholarship Day, and in the Peter A. and Mary Lou Vogt Art Gallery located in Lyons Hall.

The FAS 250 Studio Art Capstone course provides an opportunity for studio art minors to work with faculty who are practicing artists on the development of a final project or portfolio as a basis for further study in the visual arts.

A more detailed description of the program, faculty, facilities, academic, and co-curricular opportunities can be found at the Studio Art webpage (<https://www.canisius.edu/academics/programs/studio-art>).

ADVISEMENT

All students should have an advisor in the minor and should contact the Fine Arts Department Chair directly to have an advisor assigned if they do not already have one. All minors should work closely with their advisor in discussing career expectations, choosing their minor electives, developing their entire academic program, and planning their co-curricular or supplemental academic experiences.

Studio art courses place emphasis on both technical and conceptual skills through lectures, demonstrations, practice, and critique. The minor requires six courses (18 credit hours):

Required Courses

FAS 110	Two-Dimensional Design	3
FAS 120	Drawing I	3
FAS 130	Three-Dimensional Design	3

Additional FAS Courses

Select three of the following:		9
FAS 131	Sculpture I	
FAS 140	Introduction to Still Photography	
FAS 141	Digital Photography	
FAS 150	Color	
FAS 160	Printmaking I	
FAS 170	Studio Painting I	
FAS 222	Figure Drawing I	
FAS 250	Studio Art Capstone	

FAS 260 Printmaking II

Total Credits

18

LEARNING GOALS & OBJECTIVES

Learning Goal 1

Studio Art students will use visual design terminology in speaking and writing.

Students will:

- **Objective A:** Define the elements and principles of design in visual art through group discussion and critique.
- **Objective B:** Write an artist's statement, reflective paper or critique using technical terms to communicate ideas using technical terms.

Learning Goal 2

Studio Art students will develop technical skills.

Students will:

- **Objective A:** Utilize hand/eye coordination to render from life realistically
- **Objective B:** Utilize skills specific to different studio disciplines such as woodworking, printmaking, carving, sculpting or photography to create work in those fields.

Learning Goal 3

Studio Art students will use written and verbal skills to articulate concepts and techniques critically.

Students will:

- **Objective A:** Explicate the rationale behind their work materially, conceptually and formally in an artist statement
- **Objective B:** Engage in critical discourse on their work and the work of their peers during group critiques.

Learning Goal 4

Studio Art students will describe developments and trends in art history and contemporary art via artist statement and group critique.

Students will:

- **Objective A:** Position their work within a contemporary artistic framework and compare their work within larger art historical themes both written and orally.
- **Objective B:** Evaluate any given piece of art within a contemporary framework and find its fundamental historical significance during group critiques and in written statements or reflection papers.

Learning Goal 5

Studio Art students will experience placing work on public display.

Students will:

- **Objective A:** Locate galleries or venues appropriate for the display of their work.
- **Objective B:** Curate and hang their work for exhibition.

History

Chair: David R. Devereux, PhD

INTRODUCTION

Students of history see the past as a fascinating and constantly changing place. They explore the past and develop understanding of the process of change over time by carefully examining evidence relevant to the

specific cultures, periods, and geographic regions that excite their interest. History students at Canisius pursue their interests through a wide variety of courses ranging from the ancient to the modern periods, focusing on various geographical regions, and incorporating diverse political, social, economic, cultural, and intellectual themes. They learn that the historian's craft is multifaceted, incorporating not only knowledge of particular events and people, but also skills in critical thinking and both expository and argumentative writing. By emphasizing those skills, the study of history provides excellent preparation for careers in law, communications, journalism, library science, government service, teaching, and business. For a more detailed description of our program, faculty, and academic and co-curricular opportunities please go to the History Department website (<https://www.canisius.edu/academics/programs/history>).

QUALIFICATIONS

Students must maintain a 2.0 overall average to graduate with a degree in history.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

MAJOR EXPERIENCES

The history department offers a departmental honors program consisting of two advanced seminars: HIS 401 Historical Methodology and HIS 411 Senior Honors Thesis. These courses are designed to develop the research, writing, and analytical skills necessary for graduate and professional school. Students who complete HIS 401 and HIS 411 with a 3.25 average, and a 3.00 average in all their history courses, graduate with honors in history. The History Honors program is appropriate for students majoring in history as well as Social Studies Education. It is compatible with the All-College Honors Program as well as the Core Curriculum. History majors also pursue a variety of off-campus experiences. Canisius offers study abroad programs in Europe, Asia, Latin America, and Australia; any of these programs can be combined with the history major. The department offers a variety of opportunities for academic travel. In recent years students and faculty members have combined travel with study of the Holocaust, the American Civil Rights Movement, and Native American History. History students also undertake internships which offer the opportunity to explore opportunities outside academia, particularly in the exciting field of public history. A variety of extracurricular and co-curricular activities are organized by the History Club. Qualified students are invited to join Phi Alpha Theta, the national honors society in history.

ADDITIONAL COURSE CONSIDERATIONS

Students majoring in history are strongly encouraged to study either an ancient or modern foreign language. Foreign language study is essential for those who plan to study history at the graduate level; at the undergraduate level, it plays a vital role in achieving the Core goal of global awareness as

well as the history program's objective of developing historical knowledge which is characterized by geographical and cultural breadth.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

History is multifaceted; its students find connections with nearly every other discipline. Our students pursue dual majors in a wide variety of fields including Anthropology, Business, Communications, English, European Studies, International Relations, Mathematics, Modern Languages, Philosophy, Political Science, Psychology, and Urban Studies. History majors also pursue Pre-Law and Pre-Medical programs.

History majors interested in teaching at the secondary level often pursue a dual major in history and Adolescent Education/Social Studies. Those interested in this option should consult with faculty members in both departments to coordinate the dual major. Alternatively, history majors may enter the teaching profession by pursuing a master's in education. Those interested in this "five year plan" should consult with their advisor in the department.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

The History major consists of twelve three-credit courses for a total of 36 credits. At least one course must be from the period before 1800. A maximum of four 100-level courses, including transfer and AP courses, can be applied to the major.

HIS 299	Historian's Craft	3
American History: two courses		6
One course must be at the 300-level		

European History: two courses One course must be at the 300-level	6
Africa/Asia/Latin American History: two courses One course must be at the 300-level	6
Senior Seminar	3

MAJOR ELECTIVES

300-level History course: one course	3
Major electives: three courses	9

Courses at the 100 and 200 level assume no prior college-level study. They are introductory courses for the major, and satisfy Field 4 requirements in the Core Curriculum. 100-level courses are broad surveys which furnish students with a general knowledge of the history and traditions of various regions and periods. 200-level courses are somewhat more specific in approach, focusing on individual nations outside the United States, specific populations, or particular themes. Both 100- and 200-level courses provide the student with an intellectual and chronological framework for further historical study and for work in other disciplines. Courses at the 300 and 400 level deal with a wide variety of specialized areas of historical inquiry. Some courses focus on major national or geographic areas, while others emphasize period, topical, thematic, or methodological approaches. These upper-level courses provide students with an opportunity for further development of their historical understanding as well as their skills in writing and critical thinking. They are appropriate for history majors and minors and for non-majors who have completed the Field 4 requirement and wish to continue their study of history at a more advanced level.

Freshman	
Fall	Spring
1-2 History courses	1-2 History courses
Sophomore	
Fall	Spring
HIS 299	1-2 History courses
One History course	
Junior	
Fall	Spring
1-2 History courses	1-2 History courses
Senior	
Fall	Spring
1-2 History courses	Senior History Seminar

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Majors will develop skills in historical writing.

Students will:

- Objective A: Compose a chronological narrative;
- Objective B: Construct a thesis, and support it with historical evidence;
- Objective C: Evaluate historical evidence in a variety of primary and secondary sources;
- Objective D: the ability to use citation practices appropriate to the historical profession to document evidence found in a variety of sources.

Student Learning Goal 2

Majors will learn to think historically.

Students will:

- Objective A: Assess the significance of events, ideas, or artifacts in their historical context;
- Objective B: Distinguish cause and effect and recognize multiple causalities in history;
- Objective C: Recognize and evaluate different historical interpretations.

The history minor complements majors in other academic departments by providing students with exposure to the study of history that is both comprehensive and intensive. The minor is appropriate for any student who enjoys and wants to pursue an interest in history. Students in related disciplines such as Business, English, Communications, Modern Languages, Psychology, Political Science, Philosophy, and Religious Studies, as well as students interested in law, may be especially interested in the history minor.

The history minor consists of seven three-credit courses:

- Two or three 100-level courses
- Four or five courses above the 100-level.

The seven courses must include:

- At least one course focusing on the period before 1800
- At least one course in American history
- At least one course in European history
- At least one course in the history of Africa, Asia, or Latin America

With the permission of the department chair, transfer students and students with an exceptional secondary background in history may be allowed to substitute upper-level courses for the 100-level requirement.

HIS 106 The Medieval World 3 Credits

The development of a distinctive European civilization between 500 and 1500. Emphasis on Europe's contacts and conflicts with the 'competing' cultures of Byzantium and Islam. This course may be used for the American history or pre-1800 period requirement for the history major or minor.

Fulfills College Core: Field 4 (History), Global Awareness

Offered: occasionally.

HIS 107 History of Modern Europe to 1815 3 Credits

The major political, economic, social and intellectual currents in Western Civilization from 1500 to 1815. This course may be used for the European history or pre-1800 period requirement for the history major or minor.

Fulfills College Core: Field 4 (History), Global Awareness

Offered: fall and/or spring.

HIS 108 History of Modern Europe since 1815 3 Credits

The major political, economic, social and intellectual currents in Western Civilization from 1815 to the present. This course may be used for the European history requirement for the history major or minor.

Fulfills College Core: Field 4 (History), Global Awareness

Offered: fall and/or spring.

HIS 109 History of Asia to 1800 3 Credits

Comparative study of civilizations, cultures, religions and institutions of the Far East, and South Asia. This course may be used for the African/Asian/Latin American history or pre-1800 period requirement for the history major or minor.

Fulfills College Core: Field 4 (History), Global Awareness

Offered: fall.

- HIS 110 History of Asia Since 1800** 3 Credits
The various independence and revolutionary movements and their evolution into the modern nation-states of Asia. This course may be used for the African/Asian/Latin American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: spring.
- HIS 123 History of the United States: The Colonial Period to Reconstruction** 3 Credits
Introduction to major themes of American history through the Civil War including: the Columbian Exchange and colonization, American Revolution, paradox of freedom and slavery, emergence of a market economy, secession and Reconstruction. This course may be used for the American history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Diversity, Field 4 (History)
Offered: fall and/or spring.
- HIS 124 History of the United States: 1877 to the Present** 3 Credits
Industrialization and urbanization of the United States with the accompanying social, economic and political problems; America's emergence as a major power in world affairs. This course may be used for the American history requirement for the history major or minor.
Restriction: Not open to students taking or who have received credit for HIS 126.
Fulfills College Core: Diversity, Field 4 (History)
Offered: fall and/or spring.
- HIS 125 America's Story I: The Early Years** 3 Credits
This course introduces the major events, figures and themes of American history from the Colonial period to Reconstruction with an emphasis on discussion and presentation of material. This course may be used for the American history or pre-1800 period requirement for the history major or minor.
Restriction: Not open to students taking or who have received credit for HIS 123.
Fulfills College Core: Diversity, Field 4 (History), Oral Communication
- HIS 126 America's Story II: The Later Years** 3 Credits
The American Story is a course in American history that covers the late 19th century into the late 20th century as the U.S. evolved into a major industrial and international power. This course satisfies the oral communication attribute. This course may be used for the American history requirement for the history major or minor.
Restriction: Not open to students taking or who have received credit for HIS 124.
Fulfills College Core: Diversity, Field 4 (History), Oral Communication
Offered: fall and/or spring.
- HIS 131 Latin American History to 1830** 3 Credits
Pre-Columbian Indian civilizations. Conquest and colonization. Economy, society, and the Church. Eighteenth century reforms and independence. This course may be used for the African/Asian/Latin American history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: fall.
- HIS 132 Latin American History since 1830** 3 Credits
Overview of economy and society. Upheavals and revolutions in Argentina, Brazil, Colombia, Cuba, Chile and Mexico. This course may be used for the African/Asian/Latin American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: spring.
- HIS 201 United States Military History** 3 Credits
The course encompasses traditional U.S. military history; strategy, battles, technology. However, it also focuses on sociopolitical and justice issues of the U.S. armed forces. This course may be used for the American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Justice
Offered: occasionally.
- HIS 203 Castles, Bones and Battleaxes: Material Culture of the Medieval World** 3 Credits
The class examines current trends in the study of medieval material culture and explores ways in which it can be shown to the public to illustrate the rich tapestry of the medieval world. This course may be used for the European history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Field 4 (History)
Offered: occasionally.
- HIS 204 Soccer in Global History** 3 Credits
Course focuses on the global history of soccer. This course may be used for the European or African/Asian/Latin American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History)
Offered: occasionally.
- HIS 211 Women In The Western World** 3 Credits
Comparative history of women in Europe, Britain and America from Renaissance to present. Deals with the changing role of women in society, politics and the economy and on the development of feminism as an intellectual and political force. This course may be used for the European or American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: occasionally.
- HIS 212 Men and Ideas in History** 3 Credits
Role of ideas in historical change. Relationship between the ideas of a particular period and the social, political and economic forces that helped to shape them. This course may be used for the European history requirement for the history major or minor.
Fulfills College Core: Field 4 (History)
Offered: occasionally.
- HIS 213 Twentieth Century Europe** 3 Credits
Major political, economic, social and intellectual currents in Europe since 1900. This course may be used for the European history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: fall and/or spring.
- HIS 220 The History of Food** 3 Credits
Explores the evolving role of food in western societies from the middle ages to the present. Topics will include the medieval fascination with spices, Europe's adoption of 'New World' foods like potatoes and tomatoes, the role of food shortages and rationing in wartime, and the recent emergence of a diverse international 'foodie culture.' This course may be used for the European or African/Asian/Latin American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: occasionally.

- HIS 226 History of Ireland** 3 Credits
Examines political, social and cultural developments from medieval origins through invasion, conquest, colonization and finally independence from Great Britain. Special emphasis on the development of Irish nationalism and on the emergence of Eire as a modern European state. This course may be used for the European history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: occasionally.
- HIS 229 The Violent Century in Films** 3 Credits
The major events of the 20th century, including World Wars I and II, the Russian Revolution, the Great Depression, the rise of Fascism and the Vietnam War. This course may be used for the European or African/Asian/Latin American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History)
Offered: fall and/or spring.
- HIS 230 The Holocaust in Historical Perspective** 3 Credits
A historical survey of the Holocaust that places Nazi Germany's campaign to exterminate European Jewry during World War II (1939-45) in a broader historical context by tracing the history of anti-Semitism from its origins in late antiquity to the emergence of racial anti-Semitism in the nineteenth and twentieth centuries. This course may be used for the European history requirement for the history major or minor.
Fulfills College Core: Field 4 (History)
Offered: fall and/or spring.
- HIS 235 From Jamestown to Yorktown: Making the United States** 3 Credits
Explores the political, economic, social, and cultural stories of North America from the era of pre-European contact through the settlement of the English colonies in the seventeenth and eighteenth centuries to the 'revolutions' of the late seventeenth century, including the period of the American Revolution. This course may be used for the American history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Diversity, Field 4 (History)
Offered: fall.
- HIS 236 From Washington to Lincoln: The Making of American Democracy** 3 Credits
Class focuses on the story of American history from the end of the Revolutionary War to the end of the American Civil War, especially examining political, economic, social, and cultural issues. This course may be used for the American history requirement for the history major or minor.
Fulfills College Core: Diversity, Field 4 (History)
Offered: spring.
- HIS 237 The Making of Modern America 1865-1920** 3 Credits
This course offers a survey of the major themes of one of the most dynamic periods in American History. Among the topics covered are Reconstruction, urbanization, industrialization, mass migration, the closing of the western frontier, Progressive Reform and the Great War and its aftermath. We will interrogate a variety of written and visual sources to better understand the major conflicts of the period and how they were resolved. This course may be used for the American history requirement for the history major or minor.
Fulfills College Core: Diversity, Field 4 (History)
Offered: occasionally.
- HIS 251 Sports in America** 3 Credits
Investigates sporting endeavors from informal folk games to today's multi-billion dollar entertainment industry. Looks at the decline of amateurism, use of steroids, and practice of stadium welfare, as well as how America's sporting culture has shaped society and been influenced by industrialization, urbanization, and commercialization. This course may be used for the American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History)
Offered: occasionally.
- HIS 254 First Peoples** 3 Credits
The story of the first peoples of the Americas from their initial appearance 20,000 years ago down to the present, with a special emphasis on native North America. Includes a survey of the histories and cultures of the indigenous peoples of the Americas. This course may be used for the American history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Diversity, Field 4 (History)
Offered: fall and/or spring.
- HIS 260 Canada and the World** 3 Credits
A survey of Canada's place in world history from the colonial period to the present. Among the topics examined are Native-Canadians, the British-French rivalry for North America, Canada's emergence as a nation within the British Empire, Canada-U.S. relations and the modern multicultural Canadian state. This course may be used for the American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: occasionally.
- HIS 263 Wars of Latin America** 3 Credits
Wars of independence and major conflicts of the nineteenth century. Military history of Mexican, Cuban and Nicaraguan revolutions. Border clashes and guerilla insurgencies of the twentieth century. Argentina's war with England. This course may be used for the African/Asian/Latin American history requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: every other year.
- HIS 280 The Making of Modern Africa** 3 Credits
Development of modern Africa from the diverse societies of pre-colonial Africa through the impact of imperialism to an examination of the problems facing modern African states. This course may be used for the African/Asian/Latin American history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Field 4 (History), Global Awareness
Offered: every other year.
- HIS 299 Historian's Craft** 3 Credits
These courses are designed to introduce students systematically to the analysis of historical texts, the standards of historical writing, and the methods of historical research while exploring specific topics of historical interest. Topics vary each semester; a course in this category will be offered each year. Recent topics have included the Civil Rights Movement Revisited, The History of Everyday Life, and Stalinism and Nazism.
Fulfills College Core: Advanced Writing-Intensive
Offered: fall and/or spring.
- HIS 300 Historical Geography** 3 Credits
Examines the interaction between the historical process and human, physical and cultural geography. Required for dual major in history and social studies education. This course may be used for the European or African/Asian/Latin American history requirement for the history major or minor.
Offered: every third semester.

- HIS 302 Life and Theology in Colonial Atlantic** 3 Credits
Investigates the story of the colonial Atlantic world through the life and experiences of one of America's founding fathers, such as the philosopher and theologian Jonathan Edwards, focusing on the early modern European context of which most colonists were heirs, the founding of the New England colonies in the 17th century. This course may be used for the American history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Field 1 (Religious Studies and Theology)
Offered: occasionally.
- HIS 306 American Religious Experience** 3 Credits
Overview of major thoughts, movements and personalities of American Religious History from colonial era to the present. Catholicism used as a model, focusing on themes of immigration and Americanization as central to understanding religious landscape of the U.S. This course may be used for the American history requirement for the history major or minor.
Fulfills College Core: Field 1 (Religious Studies and Theology)
Offered: occasionally.
- HIS 309 World War I** 3 Credits
A study of the origins, conduct and aftermath of the Great War from a global perspective. Emphasis on the diplomatic, social and military aspects of the War. This course may be used for the European history requirement for the history major or minor.
Offered: occasionally.
- HIS 331 British Monarchy** 3 Credits
The history of Britain's monarchy from the end of the middle ages to the present. Emphasis on the transformation of the monarchy from the center of government in the sixteenth and seventeenth centuries to a largely symbolic, even vestigial constitutional mechanism in the twenty-first. This course may be used for the European history or pre-1800 period requirement for the history major or minor.
Fulfills College Core: Oral Communication
Offered: occasionally.
- HIS 338 Britain's Global Empire** 3 Credits
The growth and character of the British Empire from 17th century through the 20th. Emphasis on social, cultural and political impact of colonization and decolonization in such regions as India, Africa, the Caribbean and Australia. This course may be used for the European history or pre-1800 period requirement for the history major or minor.
Offered: occasionally.
- HIS 339 Nazi Germany, World War II and the Holocaust, 1933-45** 3 Credits
An intensive study of the Third Reich from Hitler's appointment as chancellor in 1933 to the defeat of Nazi Germany in 1945. Course will focus on the political, diplomatic and military history of the Third Reich with special attention on the mass murder of European Jewry. This course may be used for the European history requirement for the history major or minor.
Offered: every other year.
- HIS 342 The Global Cold War** 3 Credits
In 1946 Winston Churchill proclaimed that an 'Iron Curtain' had fallen across Europe, dividing the world into two hostile camps--the 'freedom loving West,' and the 'Totalitarian East.' This course examines the history of the Cold War from the Soviet-dominated side of the Iron Curtain, focusing on events such as the arms race, the Cuban Missile Crisis, and the war in Afghanistan. This course may be used for the European or African/Asian/Latin American history requirement for the history major or minor.
Offered: every other year.
- HIS 345 The Soviet Union and After** 3 Credits
This course examines the history of the Cold War between 1945 and 1991. It focuses on the attempts of the Soviet Union and the United States to extend their influence and models of development into Asia, Africa, Latin America, and Europe through armed interventions, covert operations, espionage, and propaganda. This course may be used for the European history requirement for the history major or minor.
Offered: occasionally.
- HIS 346 The Age of European Fascism, 1919-1945** 3 Credits
A comparative analysis of fascist movements and regimes in Europe between the two world wars with particular attention devoted to fascist Italy and Nazi Germany. This course may be used for the European history requirement for the history major or minor.
Offered: every other year.
- HIS 347 The History of Marxism** 3 Credits
History of Marxism as an intellectual tradition, with emphasis on writings of Marx and Lenin, from the nineteenth to the twentieth century. This course may be used for the European history requirement for the history major or minor.
Fulfills College Core: Field 2 (Philosophy), Justice
Offered: every other year.
- HIS 348 Twentieth Century Marxism** 3 Credits
Examines the history of Marxist thought from the beginning of the 20th century to the collapse of the Communist regimes in central and eastern Europe in the turmoil of the early 1990s. This course may be used for the European history requirement for the history major or minor.
Fulfills College Core: Ethics, Field 2 (Philosophy)
Offered: every other year.
- HIS 350 America and the Holocaust** 3 Credits
Explores the response of the United States to the Holocaust, the systematic extermination of an estimated ten to twelve million people, of whom six million were Jews, during World War II. It examines the implications of the American response to the Holocaust for the inequities and prejudices that remained at the core of American life in the mid-twentieth century.
Fulfills College Core: Justice
- HIS 356 Twentieth Century China** 3 Credits
Examines the evolution of Chinese society from the imperial era, through the world wars, the Communist Revolution and the re-emergence of China as a major economic and political power. This course may be used for the African/Asian/Latin American history requirement for the history major or minor.
Offered: occasionally.
- HIS 358 Traditional Japan** 3 Credits
This course examines the roots of Japanese history and culture from ancient times. Among the topics studied are early Japanese religion and society, the court culture of the Heian era, Japanese feudalism and the transition to the modern world in the Tokugawa period. Development of modern Japan from Restoration of 1868 to the present. This course may be used for the African/Asian/Latin American history or pre-1800 period requirement for the history major or minor.
Offered: occasionally.
- HIS 365 U.S.-Latin American Relations since 1898** 3 Credits
U.S. occupations in the Caribbean and Central America. The Mexican Revolution. The CIA operations in Guatemala and Cuba. The Cold War in Latin America. The Nicaraguan Revolution and turmoil in Mexico. This course may be used for the American or African/Asian/Latin American history requirement for the history major or minor.

- HIS 370 Murder & Madness in Modern America** 3 Credits
Focuses on American murder cases and episodes of madness since 1900, including assassinations, ideological killings, serial killings, spree killings, contract murders, and garden variety household murders. Also looks at how murderers have been punished and how murder stories have entertained American society. This course may be used for the American history requirement for the history major or minor.
- HIS 372 American Revolution** 3 Credits
Exploration of the political, social and constitutional issues in the era of American Independence. In particular we will try to answer the question, "Was the American Revolution truly revolutionary?" This course may be used for the American history or pre-1800 period requirement for the history major or minor.
Offered: occasionally.
- HIS 382 New York State History** 3 Credits
This course explores the history of New York State from its colonial origins through the twentieth century in the context of major themes in American history. Special attention paid to slavery, ante-bellum reform movements, New York City, progressivism, immigration. This course may be used for the American history requirement for the history major or minor.
Offered: every other year.
- HIS 386 The Civil War Era** 3 Credits
Covers the events leading up to the War, including abolitionism and Bleeding Kansas. There will also be an in-depth examination of the military strategies and tactics of the War as well as the process of modernization that War engendered. The course will conclude with an analysis of the successes and failures of Reconstruction. This course may be used for the American history requirement for the history major or minor.
Offered: every other year.
- HIS 387 Representations of the Holocaust in Film, Literature, Art and Music** 3 Credits
For many historians, the defining moment of the twentieth century is the Holocaust -- the systematic and deliberate extermination of an estimated ten to twelve million people, of whom six millions were Jews. This course explores representations of the holocaust in literature and film since the end of World War II. This course may be used for the European history requirement for the history major or minor.
Fulfills College Core: Ethics, Field 3 (Literature and the Arts)
Offered: every other year.
- HIS 394 Modern Middle East** 3 Credits
History of Middle East from the last days of the Ottoman Empire through mandate system established by Versailles Peace Conference to struggle for independence during and after World War II. This course may be used for the African/Asian/Latin American history requirement for the history major or minor.
Offered: every other year.
- HIS 396 Politics and Society in American Film** 3 Credits
This course explores the history of film, the quintessentially democratic art, in the United States with special attention to the origins of the moving pictures, Hollywood and its Golden Age, and the assault against the movies by the House Un-American Activities Committee. This course may be used for the American history requirement for the history major or minor.
Offered: occasionally.
- HIS 399 U.S. Foreign Relations since 1898** 3 Credits
The rise of the United States as a world power since the Spanish-American War of 1898. The struggle against Germany in Europe. The Cold War against the Soviet Union and Communist China. U.S. military interventions and CIA operations in Latin America, Asia, and the Middle East. This course may be used for the American history requirement for the history major or minor.
Offered: occasionally.
- HIS 401 Historical Methodology** 3 Credits
Methods of historical research and criticism, including consideration of basic bibliographical and reference works, note-taking, and evaluation of sources. Research paper required.
Restriction: history honors students and others with permission of chair.
Offered: spring.
- HIS 405 History Seminar: US National Security** 3 Credits
US foreign relations, military history and intelligence.
Offered: occasionally.
- HIS 406 History Seminar: Soccer in Global History** 3 Credits
History of soccer in a global perspective.
Offered: occasionally.
- HIS 408 History Seminar: Social Movements through Song** 3 Credits
Social Movements in US history as represented through music.
Offered: occasionally.
- HIS 409 History Seminar: Race in Early America** 3 Credits
The issue of race in America from the early explorations to the 19th century.
Offered: occasionally.
- HIS 411 History Honors Thesis** 3 Credits
Research and writing of a thesis to satisfy requirements for graduation with Honors in History.
Prerequisite: permission of the instructor and/or the chair.
Fulfills College Core: Advanced Writing-Intensive
Offered: fall.
- HIS 414 Black Lives Matter** 3 Credits
Ever since Africans were brought to North America in chains, they have protested their enslavement and, once freed 250 years later, protested racial oppression in order to claim their identity as unique, equal, and empowered members of American society. This new Core Capstone course will consider the plight of African Americans in different historical periods, two seemingly antithetical objectives of black protest (assimilation and nationalism), and different methods to improve their lot. Behind leaders, such as Henry Highland Garnet, Frederick Douglass, Ida B. Wells, W.E.B. Du Bois, Marcus Garvey, Jo Ann Gibson Robinson, Martin Luther King, Jr., James Farmer, Malcolm X, and Alicia Garza, African Americans have pressed for fundamental human rights. Their methods of protest have included petitions, speeches, conventions, editorials, boycotts, marches, demonstrations, riots, lobbying, and social media. Throughout the course, we will consider the actions of the Black Lives Matter movement that emerged in the wake of Trayvon Martin's killing by a self-appointed vigilante.
Fulfills College Core: Core Capstone
Offered: Occasional.

HIS 421 Nature and the Arts of Angling, Restoration, and Contemplation 3 Credits

As an exercise in the genre of cultural history, this course is an introduction to the history, literary and cultural significance, and practice of fly fishing in America, as well as around the world. Students will also examine the religious themes and the 'spiritualization' often attached to fly fishing, which have been expressed in some of the most loved writings in the English language. This course may be used for the American history requirement for the history major or minor.

Fulfills College Core: Core Capstone

Offered: once a year.

HIS 440 History Seminar: 20th century Genocide and Human Rights 3 Credits

Focuses on world genocides in the 20th century.

Offered: occasionally.

HIS 450 America and the Holocaust 3 Credits

Explores the response of the United States to the Holocaust, the systematic extermination of an estimated ten to twelve million people, of whom six million were Jews, during World War II. It examines the implications of the American response to the Holocaust for the inequities and prejudices that remained at the core of American life in the mid-twentieth century. This course may be used for the American history requirement for the history major or minor.

Fulfills College Core: Core Capstone

Offered: occasionally.

HIS 460 The Life and Times of Theodore Roosevelt 3 Credits

Explores the decades popularly known as the Gilded Age and Progressive Era with special attention to Theodore Roosevelt, what he famously called 'the strenuous life,' and his efforts towards the achievement of a more just economic and social order. This course may be used for the American history requirement for the history major or minor.

Fulfills College Core: Core Capstone

Offered: once a year.

HIS 470 American Women in History and Literature 3 Credits

From devilish corsets to the Devil wearing Prada, from separate spheres to glass ceilings, and from Settlement House Cookbooks to Julia Child, American women have had myriad experiences over the past centuries. This course will explore women's lives from various perspectives using the rich literature written by women of various backgrounds. Sources include fiction and non-fiction and include memoir, autobiography, political speeches, novels, shorts stories, and musical lyrics. Much of the literature reflects on how women have defined and redefined themselves as citizens and as individuals. This course may be used for the American history requirement for the history major or minor.

Fulfills College Core: Core Capstone

Offered: occasionally.

HIS 498 Internship 3 Credits

Internships may be arranged with a variety of organizations including the Theodore Roosevelt Inaugural Site Foundation, the Buffalo and Erie County Historical Society, and the Coloured Musicians Club museum. Internships require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

HIS 499 Independent Study 3 Credits

Offers the opportunity to conduct a program of independent readings and/ or research on a topic of the student's choice under the supervision of a member of the History Department. Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

Humanities

The Humanities major includes those branches of learning that are concerned with human thought and experience in history, language and literature, philosophy, religious studies, fine arts and music. Its goal is to lead the student to appreciate those aspects of his or her own culture, as well as their relationship to the cultures of other times and places. Although the humanities major is not oriented toward a particular career, its emphasis on critical understanding and disciplined reflection prepares a student for later training in many fields of employment including law, government, journalism, teaching and human services.

QUALIFICATIONS

Students must maintain an overall 2.0 cumulative average to graduate with a degree from Canisius.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Students interested in pursuing this degree at either the Associate- or Bachelor-level should contact an Associate Dean in the College of Arts and Sciences.

The associate of arts degree in humanities program requires the completion of 60 credit hours of coursework. The program has two basic purposes:

1. It offers an immediate goal for students seeking a general introduction to the humanities (history, languages, literature, philosophy, religious studies, fine arts and music).
2. It provides a basic foundation for those who wish to go on for a bachelor's degree.

The program contains a second track designed for the prospective business major. Students who plan baccalaureate studies in the future are encouraged to choose the track that fits their individual goals. If a student remains at Canisius College, all of the coursework in the associate degree program is transferable and applicable to the bachelor's program.

CORE CURRICULUM REQUIREMENTS

All students complete Core Curriculum requirements as part of their overall Canisius Education. These requirements can be found on the Core Curriculum website (<http://www.canisius.edu/academics/core>).

MAJOR COURSE REQUIREMENTS

Select one of the following tracks (6 courses):

Humanities Track:

English: two 200 level courses

Religious Studies: two courses

Humanities: two courses, to be selected from Fine Arts, English, History, Modern Language, Music, Religious Studies, or Philosophy 300 level

Business Track:

Art and Literature: two courses

Religious Studies: two courses

Business Electives: two courses

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 60 credit hours for graduation with an Associates degree.

OTHER ASSOCIATE'S DEGREE REGULATIONS

The basic residency requirements for A.A. degrees is 30 credit hours, at least 15 of which must be completed in traditional classroom situations. No more than 30 credits may be transferred from another institution. Not all courses at other institutions are applicable to the associate degree, and transfer students are required to have a transfer evaluation completed by the college registrar.

For more information contact the Dean in the College of Arts and Sciences.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

English: two 200 level courses plus two 300 - 400 level courses in a major literary genre

History: two 300/400-level courses

Philosophy: four 200/400-level courses

Religious Studies: two 300/400-level courses

Modern Language: two courses in Modern Language or Literature in Translation and/or Civilization

Humanities: two courses to be selected from Fine Arts, History, Music, Religious Studies, Philosophy 300 level

Concentration: Three additional 300/400-level courses in one of the following departments: Fine Arts, English, History, Modern Language, Religious Studies, Philosophy

International Relations

Director: Jonathan DiCicco, PhD

INTRODUCTION

The International Relations program at Canisius College is a multidisciplinary program that is anchored in History, Modern Languages, and Political Science but also includes courses in international business, economics, religious studies, philosophy, and other academic disciplines. The goals of the program are to provide the International Relations major with a basic understanding of the issues, functions and theories of the international system and to cultivate skills in research, writing, critical thinking, analysis, and oral presentation that are necessary for success in a career in the fields of international affairs, international business, law, education, and academia. Students majoring in International Relations must also satisfy a requirement for an International Educational Experience. Each student's program is structured to maximize options after graduation. Completion of the major program will lead to a Bachelor of Arts degree in International Relations. For a more detailed description of the program, faculty, facilities, academic, and co-curricular opportunities please go to the International Relations website (<https://www.canisius.edu/academics/programs/international-relations>).

QUALIFICATIONS

The International Relations major and minor are open to any student who has completed PSC 140 (Introduction to International Relations) with a minimum grade of C. A minimum overall average of 2.00 in all courses taken to complete the major or the minor, and a minimum 2.0 cumulative GPA, is required for program completion.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Note: Advisement is the responsibility of the Director of the International Relations Program, who may share this responsibility with other members of the International Relations Advisory Council. All International Relations majors and minors are expected to consult with their advisor in the program at least once each semester.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Double majors have been developed between the International Relations Program and the Departments of History (p. 159); Modern Languages,

Literatures, and Cultures (p. 185); and Political Science (p. 209) as well as with the programs in European Studies, (p. 144) Latin American Studies (p. 174), and International Business (p. 257). It is also possible to pursue a double major with other academic programs such as Communication Studies, Criminal Justice, Economics, and Sociology/Anthropology. For further information on double majors, contact the director of the International Relations Program. Students pursuing a dual major in International Relations and another major may double count as many courses as possible toward the satisfaction of International Relations major requirements.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

All International Relations majors must take a core of nine courses in history, political science and economics, including an upper-level course in international business, and seven electives that have been approved by the International Relations Program Advisory Council for major credit. In addition, all International Relations majors must demonstrate proficiency in a modern foreign language through the Intermediate High level according to guidelines established by the American Council of Teachers of Foreign Languages, which at Canisius College typically requires successful completion of at least one 300-level foreign language course. All International Relations majors must also satisfy an international experience requirement that includes but is not limited to study abroad in a foreign university or an approved short-term program.

Select one of the following three regional history course groupings: 6

HIS 107 & HIS 108	History of Modern Europe to 1815 and History of Modern Europe since 1815 ¹	
HIS 109 & HIS 110	History of Asia to 1800 and History of Asia Since 1800	
HIS 131 & HIS 132	Latin American History to 1830 and Latin American History since 1830	
PSC 140	International Relations	3
PSC 150	Comparative Government and Politics	3
HIS 300	Historical Geography	3
ECO 101	Principles of Macroeconomics	3

International Business (300- or 400-level, approved by the International Relations Director)		3
HIS 399 or PSC 245	U.S. Foreign Relations since 1898 American Foreign Policy	3
PSC 442	Seminar in International Relations	3
7 approved International Relations major electives (see list below; including no more than 2 world culture electives)		21
Foreign Language Requirement (see text below)		
International Educational Experience (study abroad or alternative approved by the International Relations Director)		
Total Credits		48

¹ Students may substitute HIS 213 or HIS 230 for HIS 108. If students use one of these courses to fulfill the general requirements for the major, the same course may not be used as a major elective course.

MAJOR ELECTIVES

All students must successfully complete a 300 or 400-level course in a modern foreign language (3 credits) as well as seven courses (21 credits) chosen from approved list in Economics, Finance, History, International Business, Modern Languages, Political Science, Philosophy, and Religious Studies.

Approved Major Elective Courses

ECO 460	International Trade	3
ENT 312	International Entrepreneurship	3
HIS 213	Twentieth Century Europe	3
HIS 229	The Violent Century in Films	3
HIS 230	The Holocaust in Historical Perspective	3
HIS 260	Canada and the World	3
HIS 263	Wars of Latin America	3
HIS 280	The Making of Modern Africa	3
HIS 309	World War I	3
HIS 338	Britain's Global Empire	3
HIS 339	Nazi Germany, World War II and the Holocaust, 1933-45	3
HIS 342	The Global Cold War	3
HIS 345	The Soviet Union and After	3
HIS 346	The Age of European Fascism, 1919-1945	3
HIS 347	The History of Marxism	3
HIS 348	Twentieth Century Marxism	3
HIS 356	Twentieth Century China	3
HIS 365	U.S.-Latin American Relations since 1898	3
HIS 394	Modern Middle East	3
HIS 399	U.S. Foreign Relations since 1898	3
HON 231	War & Peace since 9/11	3
HON 247	Islam: Religion, History, and Culture	3
IBUS 301	Fundamentals of International Business	3
MGT 380	International Business Seminar	3
MGT 440	Global Supply Chain Management	3
MGT 472	Comparative Management Systems	3
MGT 475	Doing Business in Latin America	3
MKT 375	International Marketing	3
MKT 478	Global Logistics	3

PSC 241	Human Rights and Globalization	3
PSC 242	International Organizations	3
PSC 244	War: Causes and Consequences	3
PSC 245	American Foreign Policy	3
PSC 249	Protest, Politics, & the State	3
PSC 250	Politics in Latin America	3
PSC 345	Transnational Crime After 9/11	3
PSC 346	National Security Council	3
PSC 355	European Union	3
PSC 360	Political Economy of the Developing World	3
PSC 370	Domestic Conflicts & Peace	3
PSC 452	Politics of Identity in Europe	3

SPA 420	Personal Narrative: Understanding Reality and the Self in Contemporary Spanish Narrative.	3
SPA 453	Almodóvar and La Movida: The Films of Pedro Almodóvar	3
SPA 455	Spanish Short Fiction	3
SPA 456	Cuban Cinema of the Revolution	3
SPA 459	The Body Erotic/The Body Politic: Sexuality as Political Discourse in Latin America and Spain	3
SPA 460	Lorca and his Époque	3

FOREIGN LANGUAGE REQUIREMENT

The modern foreign language requirement in the International Relations major is not a course but a proficiency requirement that at Canisius is normally satisfied by successfully completing ML 215-216/217 plus at least one course at the 300 level or above. If students are not placed at the 215-216/217 level when they enroll at Canisius, it will take them two extra semesters in the foreign language to meet this requirement. In other cases students may already have taken the equivalent of these courses in high school and therefore do not have to take them at Canisius but should continue their language preparation with a 300-level course in the language they have studied in high school. Students who study abroad in a country where the spoken language is a language other than English and take courses in that language as part of their study abroad experience may use this to satisfy the modern language requirement in the International Relations major.

INTERNATIONAL EDUCATIONAL EXPERIENCE

All students majoring in International Relations must satisfy a requirement for International Education Experience. The most popular, but by no means the only way in which this requirement is satisfied, is by studying abroad. The International Relations Program strongly encourages its majors to fulfill the international experience requirement by spending at least one semester abroad studying at a foreign university. The Director of the International Relations Program works closely with the Director of Study Abroad at Canisius College to set up and monitor study abroad programs for Canisius students at a wide range of universities throughout the world. Canisius students may study at the following institutions under articulation agreements that have been approved by Canisius College and the host university abroad: the University of the Sunshine Coast, Queensland, Australia; the University of Antwerp in Belgium; Pontifical Catholic University of Rio de Janeiro and the Universidad Federal Do Rio Grande do Sul (UFRGS) in Porto Alegre, Brazil; La Casa in San Salvador, El Salvador; the Catholic University of Lille, the IÉSEG School of Management of Lille and Paris, and the Ecole de Management of Strasbourg in France; the University of Dortmund, the Catholic University of Eichstaett, and the Berlin School of Economics and Law in Germany; the National University of Ireland in Galway; Lorenzo de' Medici in Florence and Rome in Italy; Sophia University in Tokyo, Japan; the Universidad del Pacifico in Lima, Peru; the University of Oviedo, the Universidad Pontificia Comillas in Madrid, and the Institut Químic de Sarrià (IQS) of Barcelona in Spain; Sogang University in Seoul, South Korea; and London Metropolitan University in the United Kingdom. Students may also study at an accredited university abroad other than those listed above. Students doing this have recently studied at universities in Egypt, Jordan, Poland, and Senegal. Students who spend a semester abroad at a foreign university may count up to three courses as International Relations major electives as long as these courses have been pre-approved by the director of the International Relations Program. Students who spend

Approved World Culture Electives

International Relations Majors are encouraged to satisfy their Core Curriculum requirements in Fields 1, 2, and 3 by taking courses that provide a cultural dimension to the study of international relations. Under the current IR major curriculum students may take one or two of these courses – depending upon the particular track they may be following – as IR major electives. Courses offered by the Department of Modern Languages, Literatures, and Cultures (e.g., FRC, GER, SPA) require prerequisites and are generally taught in the language of study.

FRC 433	Survey of French and Francophone Literature	3
FRC 437	French and Francophone History and Culture Through Film I	3
FRC 452	Tour de l'Amérique du Nord: Following the French in North America	3
FRC 453	War and Memory	3
FRC 454	Heritages Francophones	3
GER 467	Germany since 1871 - Political System and Form of Government	3
PHI 271	Philosophy of Human Rights	3
GER 441	The Young Generation and Civil Courage - 1848 to today	3
GER 445	German Customs and Traditions	3
GER 453	German Literature after 1945	3
GER 455	The Weimar Republic: Culture and Literature	3
GER 465	1968 in the European Context	3
GER 472	Contemporary German Film	3
GER 475	The History of German Film since Weimar	3
HIS 226	History of Ireland	3
HIS 331	British Monarchy	3
HIS 358	Traditional Japan	3
HIS 387	Representations of the Holocaust in Film, Literature, Art and Music	3
HON 248	Religions of the East	3
HON 357	Global Pentecostalism	3
RST 220	Introduction to Eastern Religions	3
RST 222	African Religions	3
RST 224	Islam: Tradition and Revival	3
RST 327	Modern Global Christianity	3
SPA 405	Spanish Literary Myths	3
SPA 406	History & Politics in Cuba	3

a year studying at a foreign university may be able to count more than three courses as International Relations major electives, but this will require special permission from the director of the International Relations Program. As a general rule, students must complete the International Relations Core of nine courses at Canisius College. Exceptions to this rule may be approved by the International Relations Program Advisory Council.

Under some circumstances a short-term study abroad experience may be desirable. Recent examples of opportunities available include programs in Argentina, Canada (Québec), Costa Rica, Cuba, France, Puerto Rico, and Spain, among others. Majors interested in these experiences should inquire with the Department of Modern Languages, Literatures, and Cultures (or other sponsoring programs) for more information. Students also may inquire with the Study Abroad Office for summer programs at The Catholic University of Lille, France; IÉSEG, Paris, France; the Berlin School of Economics and Law, the Catholic University of Eichstaett, and the Technical University of Dortmund in Germany; the National University of Ireland, Galway; Lorenzo de' Medici in Florence and Rome, Italy; the Universidad de Oviedo and the Universidad Pontificia Comillas in Spain; and the Sacred Heart University in Puerto Rico.

All International Relations majors and minors planning international educational experiences, whether short-term or traditional Study Abroad, must consult in advance with the Study Abroad office, the Director of the International Relations Program, the Chair or Director of all relevant academic programs, and the student's Associate/Assistant Dean to discuss whether courses completed abroad may satisfy academic requirements at Canisius College. Language credit may be awarded but this requires prior approval from the Department of Modern Languages, Literatures, and Cultures.

ADDITIONAL COURSE CONSIDERATIONS

Within the International Relations major a student may pursue one of four distinct tracks in International Business, International History, International Politics, and Language and World Culture. A student may also opt to pursue none of these tracks but fulfill the program major requirements listed above without concentrating in any particular area of the program. If a student chooses to pursue one of these four tracks, this will affect his or her choice of major electives. A student pursuing one of these tracks would still be required to take a modern foreign language through the Intermediate High level (including at least one 300-level course in that language) and to satisfy the international experience requirement. For further information, contact the director of the International Relations Program. For further information on each of these tracks, please go to the International Relations website (<http://www.canisius.edu/international-rel/program>).

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
PSC 140	PSC 150
Select one of the following:	Select one of the following:
HIS 107	HIS 108
HIS 109	HIS 110
HIS 131	HIS 132

Modern Language at appropriate level	Modern Language at appropriate level
ECO 101	
Sophomore	
Fall	Spring
PHI 101	IR Major Elective
Modern Language 300-level	IR Major Elective
HIS 399 or PSC 245	
IR Major Elective	
Junior	
Fall	Spring
HIS 300	IR Major Elective
IR Major Elective	IR Major Elective or 300-400 level Business
IR Major Elective or 300-400 level Business	

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

International Relations Majors will demonstrate a basic knowledge of the components and dynamics of the international system.

Students will:

- Objective A: Demonstrate an understanding of the issues, functions, and theories of the international system;
- Objective B: Demonstrate an understanding of the role of history in international affairs;
- Objective C: Demonstrate an understanding of the role of geography in international affairs;
- Objective D: Demonstrate an understanding of the similarities and differences in political systems and economies;
- Objective E: Demonstrate an understanding of the role of the United States in the international system.

Student Learning Goal 2

International Relations majors will develop competence in the skills that are appropriate to the discipline and that are necessary for success.

Students will:

- Objective A: Demonstrate competence in the techniques of scholarly research in the field of International Relations;
- Objective B: Demonstrate competence in the techniques of scholarly writing in the field of International Relations;
- Objective C: Demonstrate competence at the ACTFL intermediate-high level in the use of a modern foreign language;
- Objective D: Be able to analyze an international problem or issue in a manner that demonstrates global or regional understanding and sensitivity to cultural difference.

A minor in International Relations consists of nine courses, of which two may be used to satisfy requirements in Fields 4 and 5 of the Canisius College core curriculum. A student pursuing a minor in International Relations must also demonstrate intermediate competence in a modern foreign language. Generally this proficiency is demonstrated by successful completion of a modern language through the 215 level.

INTERNATIONAL RELATIONS MINOR CURRICULUM

Select one of the following three regional history course groupings: 6

HIS 107 & HIS 108	History of Modern Europe to 1815 and History of Modern Europe since 1815 ¹	
HIS 109 & HIS 110	History of Asia to 1800 and History of Asia Since 1800	
HIS 131 & HIS 132	Latin American History to 1830 and Latin American History since 1830	
PSC 140	International Relations	3
PSC 150	Comparative Government and Politics	3
HIS 300	Historical Geography	3
International Business course (300- or 400-level approved by the International Relations Director)		3
Foreign Language requirement (see text above)		
3 International Relations electives ²		9
Total Credits		27

¹ Students may substitute HIS 213 or HIS 230 for HIS 108. If students use one of these courses to fulfill the general requirements for the minor, the same course may not be used as an elective course.

² International Relations minors must choose three courses from the list of Approved Major Elective Courses in the curriculum section of the major (p. 168).

Journalism

Director: S. Catherine Foster, PhD

INTRODUCTION

The Communication Studies Department's major in journalism integrates deep, socially responsible reporting and writing with appropriate digital media. Students seeking a Bachelor of Science degree in journalism tell true stories across print, broadcast, online and mobile platforms. In keeping with the trend toward media convergence, they think visually, use social media to report and promote stories and design multimedia publications.

For additional information about the major visit the Journalism website (<https://www.canisius.edu/academics/programs/journalism>).

QUALIFICATIONS

Journalism majors must have a cumulative GPA of at least 2.0, a minimum grade of C- in all journalism courses, and a minimum overall average of 2.0 in all journalism coursework. The performance of all majors is subject to review relative to their continuance in the program. Journalism majors need at least 36 hours of journalism courses (or 33 hours for dual majors).

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their

entire academic program and planning their co-curricular or supplemental academic experiences.

A journalism major is assigned an advisor at the beginning of the freshman year. Those who transfer into the journalism major should contact the Communication Studies office at 888-2115 to be assigned an advisor.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Students complete a minimum of 33 credit hours of journalism courses. Students may wish to consider developing a foreign language competency, as well as a specialty in a field such as political science, economics, science, or religion.

Each journalism major and dual major is assigned a department faculty advisor to plan an individual program that will satisfy the department's requirements and the student's personal goals. Course selections develop from the journalism requirements, prerequisites and electives.

Journalism students who are dual majors and successfully complete 3 or more credit hours in Independent Study or Internships (JRN 488, JRN 498 or JRN 499) are required to complete 30 hours of in-class credit in order to complete the journalism major.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Seven journalism courses are required:

JRN 100	Introduction to Journalism	3
JRN 200	Multimedia Storytelling	3
COM 203	Writing for the Public Media	3

JRN 301	Newsgathering and Reporting	3
JRN 310	Journalism	3
COM 351	Media Ethics	3
or DMA 216	Digital Media Law	
JRN 490	Senior Project and Portfolio	3
Total Credits		21

UPPER-LEVEL CONCENTRATION COURSES

Journalism majors will select an area of concentration, also open to other majors who may be interested. There are three options for the concentration, each of which requires a total of five courses for 15 credit hours:

Sports Journalism and Broadcasting

Required Courses

JRN 336	Sports Journalism	3
JRN 358	Sports Field Production I	3
JRN 359	Sports Field Production II	3

Concentration Electives

Sports Communication – Select one of the following:		3
COM 359	Communication and Sports	
SPMT 430	Sport Communications	
SPMT 412	Sport Marketing	
Sports Broadcast and Journalism – Select one of the following:		3
JRN 201	Advanced Multimedia Storytelling	
JRN 311	Advanced Journalism and Investigative Reporting	
JRN 322	Feature/Magazine Writing	
COM 361	Introduction to TV Production	
Total Credits		15

Narrative Journalism

Required Courses

JRN 311	Advanced Journalism and Investigative Reporting	3
JRN 322	Feature/Magazine Writing	3
JRN 342	Narrative Journalism	3

Concentration Electives

Select two of the following:		6
ENG 294	Introduction to Creative Writing	
JRN 369	Television Features	
JRN 201	Advanced Multimedia Storytelling	
COM 374	Film History	
Total Credits		15

Multimedia Journalism

Required Courses

JRN 201	Advanced Multimedia Storytelling	3
DMA 342	Introduction to Web Design	3
or CSC 108	Introduction to Web Computing	
COM 361	Introduction to TV Production	3

Concentration Electives

Select two of the following:		6
DMA 218	Motion Graphics	

DMA 212	2D Graphics	
JRN 322	Feature/Magazine Writing	
JRN 369	Television Features	
JRN 311	Advanced Journalism and Investigative Reporting	
Total Credits		15

INTERNSHIPS AND INDEPENDENT STUDY

Internships (JRN 488, JRN 498), awarding up to a maximum of 12 credit hours, may be earned by qualified journalism majors at approved Buffalo or other locations. The internships are individually arranged, require department approval and are available only to junior or senior candidates with a cumulative GPA of at least 2.5 and a journalism average of at least 2.7. Internships are taken on a pass/fail basis and are counted toward free elective credit. Students are encouraged to plan early to do an internship during their junior or senior year.

Independent Study (JRN 499) provides the opportunity for a student to work under the supervision of a faculty member to complete an academic research project culminating in a scholarly product or news and feature stories, construction of a news web site, etc. The opportunity for independent study (three credits) is open only to junior or senior majors in good standing, with consent of the instructor and chair. Independent study, it should be noted, is granted only in very specific circumstances. Please see the department chair for more information.

Note: To gain valuable experience, journalism majors are advised to participate in clubs such as the student newspaper, television station, radio station, and digital media arts clubs.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
JRN 100	JRN 301
JRN 200	COM 203

Sophomore

Fall	Spring
JRN 310	COM 351 or DMA 216

Junior

Fall	Spring
Concentration requirement or elective	Concentration requirement or elective
Concentration requirement or elective	Concentration requirement or elective

Senior

Fall	Spring
Concentration requirement or elective	JRN 490

LEARNING GOALS & OBJECTIVES

These learning Goals and Objectives apply to all Journalism majors.

Student Learning Goal 1

Majors will understand the history and current state of the profession of journalism.

Students will:

- **Objective A:** Demonstrate a knowledge and understanding of Journalism's professional qualities and ethical standards, including the need to report facts fairly and accurately.
- **Objective B:** Demonstrate a knowledge and understanding of media law, the First Amendment, Sunshine Laws, and FOIA.

Student Learning Goal 2

Majors will think critically and creatively.

Students will:

- **Objective A:** Understand the nature of current and upcoming events in order to report meaningful news stories.
- **Objective B:** Exercise sound, responsible news judgment even under pressures of immediacy and competition.

Student Learning Goal 3

Majors will write for audience, platform, and message.

Students will:

- **Objective A:** Write in a style to sustain reader interest, avoiding personal opinion, unsubstantiated claims and empty prose.
- **Objective B:** Write cogently in a structure appropriate for the chosen platform.
- **Objective C:** Produce accurate stories based on facts that they have gathered, verified, analyzed and interpreted, using multiple sources and methods.

JRN 100 Introduction to Journalism 3 Credits
Introduces the history of journalism, its norms and best practices.
Offered: every fall.

JRN 200 Multimedia Storytelling 3 Credits
Introduces the fundamentals of digital systems and technologies as they apply to journalism. Through class lecture and hands-on approaches, students will learn software and hardware used for journalistic applications of web design, multimedia, video production, graphics and audio production.
Offered: spring.

JRN 201 Advanced Multimedia Storytelling 3 Credits
Students will explore multimedia storytelling through class lecture and hands-on experience of the digital systems and technologies used in journalism. The student will develop a better understanding of the nature of multimedia journalism using audio, video, graphics, animation and writing to tell news stories.
Prerequisite: JRN 200 or permission of instructor.
Offered: fall.

JRN 301 Newsgathering and Reporting 3 Credits
Grounded in the social responsibility theory of the press, this course covers both traditional methods (e.g., observing, interviewing, listening) and newer methods (e.g., Twitter, Facebook, crowd sourcing) to gather and verify material for news and feature stories, to be distributed via print, broadcast, web and mobile media.
Offered: spring.

JRN 308 Pre & Post Production 3 Credits
Students will develop and hone skills in planning video projects -- features and promotion, for example -- completed before a live broadcast, as well as preparing highlights, video recaps, websites and social media postings during a live broadcast. The course will center on sports broadcasts, to air as part of the college's partnership with ESPN.

JRN 310 Journalism 3 Credits
Focuses on writing news and features for print and on-line media, using a variety of storytelling designs (e.g., the narrative, the inverted pyramid, the focus approach) combined with a variety of multimedia presentation methods (e.g., video, audio, slideshows).
Prerequisite: JRN 100 or permission of instructor.
Offered: fall.

JRN 311 Advanced Journalism and Investigative Reporting 3 Credits
Advanced study and practice of all aspects of journalism, including news gathering, reporting, writing and editing.

JRN 322 Feature/Magazine Writing 3 Credits
Profiles and other human-interest features developed for newspapers, magazines, broadcast. Free-lance writing is introduced.
Offered: every other year.

JRN 336 Sports Journalism 3 Credits
Instruction on covering sports in the 21st century, including exposure to cross-platform journalism and the influence of social media. Students will learn practices and theories commonly encountered in locker rooms and press boxes from those in the business. Also counts as a COM elective.
Offered: spring.

JRN 342 Narrative Journalism 3 Credits
The advanced study and practice of long-form, literary- influenced journalism, from magazines and nonfiction books to cross-platform, online media outlets. Students explore methods of conceptualizing, reporting, researching and writing long-form journalism while working on a literary nonfiction project of their own. prereqs or permission of instructor.

JRN 358 Sports Field Production I 3 Credits
The principles and techniques of shooting, writing, directing and producing live broadcast events. Students in this course will be responsible for production of live basketball, hockey and other Canisius sports events aired over ESPN3 and ESPNU, as well as for other campus events as needed.
Offered: fall & spring.

JRN 359 Sports Field Production II 3 Credits
Advanced principles and techniques of shooting, writing, directing and producing live broadcast events. Students in this course will be responsible for production of live basketball, hockey and other Canisius sports events aired over ESPN3 and ESPNU, as well as for other campus events as needed.
Offered: spring.

JRN 369 Television Features 3 Credits
Design, write and produce special feature reports, multiple- part series, investigative stories and mini-documentaries. Emphasis on field work.
Offered: every other year.

JRN 380 Special Topics in Journalism 3 Credits
Course focus will vary and is designed to provide in-depth study of journalism as it applies to specialized topics and content area that may include legal, business, health and science, environment, international and/or investigative journalism.
Offered: occasionally.

JRN 488 Internship I Seminar 3-9 Credits

Student experientially learns communication functions in compatibly matched professional setting, locally or out-of- town. Faculty and on-site supervision. Seminar required. Pass/fail. May be repeated as JRN 498; 12-credit limit for JRN 488 and JRN 498 combined. Information about the internship application process is available on the Communication Studies Department website.

Prerequisite: junior or senior standing, minimum overall GPA of 2.50, minimum communication studies average of 2.70, & approval by department faculty. **Restriction:** must be JRN major.

Offered: every semester.

JRN 490 Senior Project and Portfolio 3 Credits

Culminating experience for Journalism majors in which they synthesize what they have learned in their program of study. Students work independently or as part of a reporting/ writing/editing team to produce a publishable multimedia community journalism project.

Offered: spring.

JRN 498 Internship II Seminar 3-9 Credits

Sequel to JRN 488 for students taking multiple internships. Each student is limited to a combined total of 12 credit hours for JRN 488 and JRN 498.

Prerequisite: junior or senior standing, minimum overall GPA of 2.50, minimum communication studies average of 2.70, & approval by department faculty. **Restriction:** must be JRN major.

Offered: every semester.

JRN 499 Independent Study 3 Credits

Student conducts original project or self-designed course of study under the tutelage of a Journalism faculty member. Offered only in very specific circumstances. Independent studies require an application and approval by the associate dean.

Prerequisite: junior or senior standing; & permission of instructor, chair, & associate dean. **Restriction:** must be JRN major.

Latin American Studies

Director: Paola Fajardo-Heyward, PhD

INTRODUCTION

The Latin American Studies Program (LAS) is a multi-disciplinary program that students adopt as a second or third major. Its primary focus is to promote intellectual discussion, teaching and research on Latin America and the Caribbean. The program also includes the study of Latinos in the United States. Moreover, LAS engages in a wide array of community outreach activities and programming, such as colloquia, K-12 collaboration, student conferences, and visits by renowned speakers. This complements the program's academic offerings and provides students, faculty and the local community with timely and relevant opportunities to learn about and become actively involved in issues relevant to Latin American Studies. LAS also serves to provide career opportunities for students interested in this geographical region and helps to establish stronger linkages with the Latin American and Latino communities in Western New York. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Latin American Studies website (<https://www.canisius.edu/academics/programs/latin-american-studies>).

The flexible structure of the major and minor enables students to appreciate the social, economic, political, cultural, and historical context of the subject matter, encouraging them to develop critical interdisciplinary skills. While the LAS program will include attention to the Latino communities in Western New York and the United States, its coursework and extracurricular

experiences will move beyond these boundaries to view these communities as being embedded within global processes.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

General Requirements

- The Latin American Studies major must be combined with another major at Canisius;
- There are no limits on the number of courses that count for this major that also apply to another major;
- Modern Language Requirement: At least a C in SPA 217 or its equivalent;
- The Program Director can allow students to pursue French on an exceptional basis to take into account the French-speaking parts of "Latin America";
- The Program Director can also allow a lower level of coursework in Portuguese to fulfill this requirement (e.g., if combined with a study abroad in Brazil);
- Study Abroad Requirement: an approved short term or semester-long program in Latin America or the Caribbean.

Ten Required Courses

Social Science and History – 3 courses

- all three courses must be taken at Canisius; students must choose to take one of each of the following two academic disciplines:
- | | | |
|---------|-------------------------------------|---|
| HIS 131 | Latin American History to 1830 | 3 |
| HIS 132 | Latin American History since 1830 | 3 |
| PSC 150 | Comparative Government and Politics | 3 |
| PSC 250 | Politics in Latin America | 3 |

The third course must be taken from any of the following academic departments/disciplines: Business, Education, History, Political Science and Honors.

Language, Literature, and Culture – 3 courses

- Must be taken at Canisius from at least two of the following academic departments/disciplines: Modern Languages, Literature and Culture, Religious Studies, Philosophy, Fine Arts History, Fine Arts Music, and Honors.

Major Electives – 3 courses

- may be taken in any discipline and/or abroad;
- could include a service-learning course at Canisius involving the Latino community in Western New York.

Senior Capstone – 1 course

- Core or major capstones fulfill this requirement if students complete a major project on Latin America and/or Latin@s in the United States.

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Latin American Studies majors think critically about Latin American societies, governments, and policies through both historical and contemporary lenses.

Students will:

- **Objective A:** Interpret important political concepts, theories, events, actors, and processes pertinent to Latin American analyses;
- **Objective B:** Apply knowledge of Latin American history and diverse cultures to contemporary social and political themes;
- **Objective C:** Identify regional political, social, and economic trends and the impact of colonialism, globalization, and U.S. foreign policy towards Latin America.

Student Learning Goal 2

Latin American Studies majors use research to articulate ideas and arguments clearly and effectively in the field of Latin American Studies.

Students will:

- **Objective A:** Integrate knowledge from different academic disciplines into a coherent paper, presentation or project that addresses a topic in Latin American Studies;
- **Objective B:** Conduct independent research and follow appropriate formats in documenting resources;
- **Objective C:** Communicate information, ideas, and research results effectively.

Student Learning Goal 3

Latin American Studies majors communicate in a modern language that is appropriate to the area of studies and necessary for professional success.

Students will:

- **Objective A:** Display competency of a Latin American language at the American Council on the Teaching of Foreign Languages (ACTFL) intermediate level.

GENERAL REQUIREMENT

- Modern Language Requirement: At least a C in SPA 217.

SIX REQUIRED COURSES

Social Science & History – 3 courses

- must be taken from at least two of the following academic departments/disciplines: Business, Education, History, Political Science and Honors.

Language, Literature, and Culture – 3 courses

- must be taken from at least two of the following academic departments/disciplines: Modern Languages, Literature and Culture, Religious Studies, Philosophy, Fine Arts, History, Fine Arts Music, and Honors.

Mathematics and Statistics

Chair: Byung-Jay Kahng, PhD

INTRODUCTION

The Department of Mathematics and Statistics strives to transmit an understanding and appreciation of mathematics: its substance, its applicability, its literature, its current directions and problems, its historical development, its human worth and values; and to promote the development

of skill in the practice of mathematics. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Mathematics and Statistics website (<https://www.canisius.edu/academics/programs/mathematics-and-statistics>).

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Mathematics and Statistics. Students must have a minimum grade of C- in all courses in the major.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Popular double majors with mathematics are economics, computer science, education, and physics, but we have also had students double major in math and music, English, political science, philosophy, Spanish, psychology, pre-medicine, and other fields.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Option A (Mathematics Major)

MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 222	Differential Equations	3
or MAT 351	Probability & Statistics I	
MAT 230	Logic, Set Theory, and Proofs	4
MAT 311	Abstract Algebra	4
MAT 321	Real Analysis	4
MAT 380	Mathematics Seminar	1
MAT 381	Mathematics Seminar	1
MAT 480	Mathematics Seminar	1
Select one of the following:		3
MAT 312	Topics in Algebra	
MAT 322	Topics in Analysis	
MAT 352	Probability & Statistics II	
Select four courses from the following:		12-16
Any additional 300 or 400-level mathematics courses		
PHY 335	Mathematical Analysis for Physicists	
PHY 446	Quantum Mechanics I	
Total Credits		49-53

Option B (Mathematics with a Concentration in Another Area)

MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 222	Differential Equations	3
or MAT 351	Probability & Statistics I	
MAT 230	Logic, Set Theory, and Proofs	4
MAT 311	Abstract Algebra	4
MAT 321	Real Analysis	4
MAT 380	Mathematics Seminar	1
MAT 381	Mathematics Seminar	1
MAT 480	Mathematics Seminar	1
Select one of the following:		3
MAT 312	Topics in Algebra	
MAT 322	Topics in Analysis	
MAT 352	Probability & Statistics II	
Select two of the following:		6-8
any additional 300 or 400-level mathematics courses		
PHY 335	Mathematical Analysis for Physicists	
PHY 446	Quantum Mechanics I	
Total Credits		43-45

Option C (Statistics)

MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 211	Calculus III	4

MAT 219	Linear Algebra	4
MAT 222	Differential Equations (or 300 or 400-level mathematics course)	3
MAT 230	Logic, Set Theory, and Proofs	4
MAT 321	Real Analysis	4
MAT 322	Topics in Analysis	3-4
or MAT 311	Abstract Algebra	
MAT 351	Probability & Statistics I	3
MAT 352	Probability & Statistics II	3
MAT 380	Mathematics Seminar	1
MAT 381	Mathematics Seminar	1
MAT 480	Mathematics Seminar	1
Select three of the following:		9
MAT 341	Numerical Analysis	
MAT 353	Regression Analysis	
MAT 354	Experimental Design and Statistical Computing	
MAT 370	Topics in Statistics	
Total Credits		48-49

MAJOR ELECTIVES

Option A

Select one of the following:		6
PHY 223	General Physics for Physical Science Majors I & PHY 224 and General Physics for Physical Science Majors II	
Two economics courses		
Total Credits		6

Option B

Select one of the following:		6
PHY 223	General Physics for Physical Science Majors I & PHY 224 and General Physics for Physical Science Majors II	
Two economics courses		
Four courses in another area approved by the Department of Mathematics and Statistics		
Total Credits		6

Option C

Select one of the following:		6
PHY 223	General Physics for Physical Science Majors I & PHY 224 and General Physics for Physical Science Majors II	
Two economics courses		
Total Credits		6

ADDITIONAL COURSE CONSIDERATIONS

Option A is designed to prepare the student for positions in which mathematical competence is sought, as well as for advanced study in graduate school.

Option B allows the student to develop expertise in another area besides mathematics. Many students combine this option with a major or minor in another department. Students interested in education can get a dual

major to give them a strong background in mathematics while fulfilling the requirements of the School of Education.

Option C prepares the student for advanced work or graduate study and the many careers which utilize statistical thinking. This option, together with appropriate courses in business, constitutes a good preparation for a career in actuarial science.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSES

Option A

Freshman

Fall	Spring
MAT 111	MAT 112
	PHY 223 (or ECO course)

Sophomore

Fall	Spring
MAT 211	MAT 219
MAT 230	MAT 222 or 351
PHY 224 (or ECO course)	

Junior

Fall	Spring
MAT 311	MAT 381
MAT 321	MAT elective
MAT 380	

Senior

Fall	Spring
MAT 480	Select one of the following:
MAT elective	MAT 312
MAT elective	MAT 322
	MAT 352
	MAT elective

Option B

Freshman

Fall	Spring
MAT 111	MAT 112
	PHY 223 (or ECO course)

Sophomore

Fall	Spring
MAT 211	MAT 219
MAT 230	MAT 222 or 351
PHY 224 (or ECO course)	

Junior

Fall	Spring
MAT 311	MAT 381
MAT 321	MAT elective
MAT 380	

Senior

Fall	Spring
MAT 480	Select one of the following:
MAT elective	MAT 312
	MAT 322

MAT 352

Option C

Freshman

Fall	Spring
MAT 111	MAT 112
	PHY 223 (or ECO course)

Sophomore

Fall	Spring
MAT 211	MAT 219
MAT 230	MAT 351
PHY 224 (or ECO course)	

Junior

Fall	Spring
MAT 321	MAT 381
MAT 352	Select one of the following:
MAT 380	MAT 222
	MAT 322
	MAT elective
	Select one of the following statistics electives:
	MAT 341
	MAT 353
	MAT 354
	MAT 370

Senior

Fall	Spring
MAT 480	Select one of the following:
MAT 311 (or MAT elective)	MAT 222
Select one of the following statistics electives:	MAT 322
MAT 341	MAT elective
MAT 353	Select one of the following statistics electives:
MAT 354	MAT 341
MAT 370	MAT 353
	MAT 354
	MAT 370

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1:

Mathematics majors will perform tasks requiring logical reasoning.

Students will:

- **Objective A:** Understand the different types of mathematical statements and how they are used, including definitions, axioms, hypotheses, conclusions, theorems, corollaries, lemmata, and conjectures;
- **Objective B:** Understand methods of proof.

Student Learning Goal 2

Mathematics majors will know the content of the fundamental fields of mathematics and can perform tasks requiring complex reasoning.

Students will:

- **Objective A:** Use basic skills to manipulate expressions;
- **Objective B:** Know the basic definitions and theorems of mathematics;
- **Objective C:** Be able to perform tasks requiring complex reasoning.

Student Learning Goal 3

Mathematics majors will advance their understanding and knowledge of mathematics and their ability to convey mathematical concepts through currently available technology.

Students will:

- **Objective A (Information Literacy):** Use the internet and/or library resources to obtain relevant information concerning historical information or mathematical content in regards to current course or project. Students will be expected to both look up sources and learn to search for their own sources;
- **Objective B (Computation):** Use computers or graphing calculators to perform labor-intensive calculations and/or create graphical displays. Programs include, but are not limited to, *Excel*, *Minitab* (or other statistical software), and *Mathematica* (or other software);
- **Objective C (Presentation):** Use technology for the purpose of elegantly presenting mathematical ideas, theories or results. Technologies include PowerPoint, Prezzi, Jing, Beamer, Latex, Word, and graphical tools.

Student Learning Goal 4

Mathematics majors will communicate mathematical ideas with precision and clarity.

Students will:

- **Objective A:** Present mathematical material in writing;
- **Objective B:** Present mathematical material orally.

MATHEMATICS MINOR

(7 courses)

Required Courses

MAT 111	Calculus I	4
or MAT 115	Calculus for Business	
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 230	Logic, Set Theory, and Proofs	4

Restricted Electives

Select two courses from any one of the following tracks: 6-8

Probability and Statistics:

MAT 351 Probability & Statistics I

MAT 352 Probability & Statistics II

Applied Mathematics:

MAT 222 Differential Equations

PHY 335 Mathematical Analysis for Physicists

MAT 341 Numerical Analysis

MAT 342 Graph Theory

Theoretical Mathematics:

MAT 311 Abstract Algebra

MAT 312	Topics in Algebra	
MAT 313	Number Theory	
MAT 321	Real Analysis	
MAT 322	Topics in Analysis	
Mathematics and Culture:		
MAT 301	History of Mathematics	
MAT 331	Geometry	
Total Credits		26-28

MAT 105 Finite Mathematics 3 Credits
Introduction to finite (non-calculus) mathematics and its applications: linear, quadratic, exponential and logarithmic functions and equations; systems of linear equations and linear programming; compound interest problems and annuities.

Fulfills College Core: Field 7 (Mathematical Sciences)

Offered: fall & spring.

MAT 106 Calculus for the Non-Sciences 3 Credits

Fundamentals of calculus for students in business, or social or behavioral sciences. Credit not allowed if student already has credit for MAT 109 & MAT 110; or MAT 111 or MAT 115.

Fulfills College Core: Field 7 (Mathematical Sciences)

Offered: fall & spring.

MAT 108 Precalculus for Sciences 3 Credits

Polynomials and rational, exponential, logarithmic, and trigonometric functions. Solving equations. Graphing functions. Trigonometric identities. Credit not allowed if student already has credit for MAT 109, MAT 111, or MAT 115.

Fulfills College Core: Field 7 (Mathematical Sciences)

Offered: summer.

MAT 109 Calculus with Review I 4 Credits

For science and mathematics majors. Calculus, with topics from pre-calculus. Logarithmic and exponential functions, trigonometric functions, limits, differentiation. Credit not allowed if student already has credit for MAT 111 or MAT 115.

Fulfills College Core: Field 7 (Mathematical Sciences)

Offered: fall.

MAT 110 Calculus with Review II 4 Credits

Continuation of MAT 109. Differentiation, related rates, optimization problems, anti-differentiation, definite integral. Credit not allowed if student already has credit for MAT 111 or MAT 115.

Offered: spring.

MAT 111 Calculus I 4 Credits

For science and mathematics majors. Calculus of functions of single variable. Functions, limits, differentiation, continuity, graphing, logarithm, exponential and inverse trigonometric functions, related rates, optimization problems, mean value theorem, l'Hospital's rule, anti-differentiation, definite integral. Credit not allowed if student already has credit for MAT 109 and MAT 110 or for MAT 115.

Fulfills College Core: Field 7 (Mathematical Sciences)

Offered: fall & spring.

MAT 112 Calculus II 4 Credits

Applications of integration, integration techniques, improper integrals, sequences, series, convergence tests, Taylor's series, applications; parametric and polar curves.

Prerequisite: minimum grade of C- in one of the following MAT 109 & MAT 110, MAT 111 or MAT 115.

Offered: fall & spring.

<p>MAT 115 Calculus for Business 4 Credits Calculus for business students. Differentiation and integration of functions of one variable. Applications, concepts, examples and problems in economics and business. Credit not allowed if student already has credit for either MAT 109 and MAT 110 or for MAT 111. Prerequisite: 3 1/2 years of high school mathematics. Fulfills College Core: Field 7 (Mathematical Sciences) Offered: fall.</p>	<p>MAT 211 Calculus III 4 Credits Continuation of MAT 111 and MAT 112. Analytic geometry of 3-dimensional space and calculus of functions of several variables. Prerequisite: minimum grade of C- in MAT 112. Offered: fall & spring.</p>
<p>MAT 121 Mathematics through History 3 Credits Liberal arts mathematics course. Tracing the development of mathematical ideas globally and through history, with emphasis on problem solving techniques, quantitative thinking, and deductive reasoning. Prerequisite: 3 years of high school math or equivalent; sophomore standing or higher. Fulfills College Core: Field 7 (Mathematical Sciences), Global Awareness Offered: spring.</p>	<p>MAT 219 Linear Algebra 4 Credits Vector spaces and inner product spaces. Linear transformations and matrices. Eigenvectors, eigenvalues, and applications. Orthogonal transformations. Quadratic forms and quadric surfaces. Prerequisite: MAT 112 or permission of instructor. Offered: spring.</p>
<p>MAT 131 Statistics for Social Sciences 3 Credits A first course for majors in social or health sciences. Descriptive statistics, calculators, computer programs and introduction to inferential statistics. Credit not allowed if student already has credit for MAT 141 or MAT 351. Prerequisite: 3 years of high school mathematics or equivalent. Fulfills College Core: Field 7 (Mathematical Sciences) Offered: fall & spring.</p>	<p>MAT 222 Differential Equations 3 Credits Introduction to the theory and applications of ordinary differential equations. Prerequisite: minimum grade of C- in MAT 211. Offered: spring.</p>
<p>MAT 141 Inferential Statistics and Computers for Science 4 Credits Elementary probability theory, descriptive statistics, hypothesis testing, estimation, correlation and regression. The computer will be used with one of the standard statistical packages. Credit not allowed if student already has credit for MAT 131 or MAT 351. Prerequisite: 3 1/2 years of high school mathematics. Fulfills College Core: Field 7 (Mathematical Sciences) Offered: fall & spring.</p>	<p>MAT 230 Logic, Set Theory, and Proofs 4 Credits Transition from calculus to upper division courses: logic and methods of proof; set theory; relations, orders and functions; number systems; cardinality. Prerequisite: minimum grade of C- in MAT 112 or permission of instructor. Offered: fall.</p>
<p>MAT 150 Mathematics and Politics 3 Credits Liberal arts course emphasizing applications of math in the social sciences. Covers topics such as voting theory, decisions made by groups, measurement of political power. Prerequisite: 3 years of high school mathematics or equivalent. Fulfills College Core: Field 7 (Mathematical Sciences), Justice Offered: spring.</p>	<p>MAT 301 History of Mathematics 3 Credits Development and interrelations of major areas of mathematics, from ancient to modern times. Emphasis on both historical context and mathematical content. Mathematics as cultural heritage. Prerequisite: MAT 111 & MAT 112. Offered: fall of odd-numbered years.</p>
<p>MAT 161 Mathematics for Elementary Teachers 3 Credits Designed to provide a solid foundation for the mathematical topics encountered in elementary schools. The primary goal is to develop a deep understanding of mathematical concepts so future teachers can teach with knowledge and confidence. The main topics are: problem solving processes and strategies, elementary set theory, the theory behind basic arithmetic, number systems, basic probability and statistics, elementary geometry. Prerequisite: 3 years of high school mathematics or equivalent. Fulfills College Core: Field 7 (Mathematical Sciences) Offered: occasionally.</p>	<p>MAT 311 Abstract Algebra 4 Credits Introduction to the basic structures of abstract algebra; groups, rings, fields. Prerequisite: minimum grade of C- in both MAT 219 and MAT 230. Offered: fall.</p>
<p>MAT 191 Introduction to Discrete Mathematics 4 Credits Fundamental topics with computer science applications. Sets and logic, propositional and predicate calculus, elements of combinatorics and counting, elementary discrete probability, functions and relations, and graphs. Prerequisite: sophomore standing or instructor's permission. Offered: spring.</p>	<p>MAT 312 Topics in Algebra 3 Credits Continuation of MAT 311. Selected topics from groups, rings, integral domains, field extensions and Galois theory. Prerequisite: MAT 311. Offered: spring 2017.</p>
	<p>MAT 313 Number Theory 3 Credits Divisibility, prime numbers, numerical functions, congruencies, quadratic reciprocity, Diophantine equations. Prerequisite: MAT 311 or permission of instructor. Offered: occasionally.</p>
	<p>MAT 321 Real Analysis 4 Credits Advanced study of limits, continuity, differentiation and integration of functions. Prerequisite: minimum grade of C- in MAT 211, MAT 219 & MAT 230. Offered: fall.</p>
	<p>MAT 322 Topics in Analysis 3 Credits Continuation of MAT 321. Selected topics from functions of one or several variables. Prerequisite: minimum grade of C- in MAT 321. Offered: spring 2018.</p>
	<p>MAT 331 Geometry 3 Credits Axioms for geometry and their consequences: independence of the parallel postulate. Rudiments of hyperbolic geometry. Geometric transformations. Prerequisite: MAT 230. Offered: fall of even-numbered years.</p>

<p>MAT 341 Numerical Analysis 3 Credits The methods used to obtain numerical solutions of functional and differential equations. Polynomial interpolation. Various approximation algorithms. Prerequisite: MAT 219 & an elementary knowledge of computer programming. Offered: spring 2017.</p>	<p>MAT 361 Probability for Actuaries 1 Credit This course prepares students to take Exam P of the Society of Actuaries or Exam 1 from the Casualty Actuary Society. Key probability concepts are reviewed and students learn to apply these tools to problems encountered by actuaries. The course will develop a thorough command of calculus and probability topics. Additionally, a very basic knowledge of insurance and risk management is introduced. Prerequisite: MAT 211 & MAT 351. Corequisite: MAT 352 or permission of instructor. Offered: fall.</p>
<p>MAT 342 Graph Theory 3 Credits This course covers basic constructions on graphs. Complete graphs, bipartite graphs, trees, cycles, and more general graphs are studied along with their combinatorial properties. Euler circuits, Hamilton circuits, spanning trees. Applications of graphs to optimization problems such as the Traveling Salesperson Problem and Construction of the Minimal Spanning Trees. Prerequisite: MAT 111 or MAT 115. Offered: spring 2018.</p>	<p>MAT 362 Financial Mathematics for Actuaries 1 Credit This course prepares students to take Exam FM of the Society of Actuaries or Exam 2 from the Casualty Actuary Society. It covers interest theory (discrete and continuous) and an introduction to derivative securities. Prerequisite: MAT 111 & MAT 112 or permission of instructor. Offered: spring.</p>
<p>MAT 345 Climate and Sustainability 3 Credits This course, for majors from all the sciences, develops the use of conceptual models in understanding complicated situations, while illustrating the role of scientific arguments in societal debates about climate change and sustainability. Topics include: the Earth's energy balance, historical data for ocean and atmosphere and temperature and their circulation and oscillation patterns, the carbon cycle and biological systems, and handling large data. The increasingly sophisticated examples explored in the course will introduce the use of various areas of mathematics: linear models and networks, calculus-based dynamical systems, statistics and data assessment, and analysis of periodic phenomena. Students will learn about these topics by seeing simple examples of their use. The last part of the course will center on sustainability issues, and connections to global awareness, diversity, ethics, and justice. Prerequisite: MAT 111 or equivalent. Restriction: seniors only. Fulfills College Core: Core Capstone Offered: occasionally.</p>	<p>MAT 370 Topics in Statistics 3 Credits Selected topics in applied probability and statistics, and nonparametric statistics. Prerequisite: MAT 352 or permission of instructor. Offered: fall 2017.</p>
<p>MAT 351 Probability & Statistics I 3 Credits Introduction to the mathematical aspects of modern probability theory and the theory of statistics. Prerequisite: MAT 211. Offered: spring.</p>	<p>MAT 380 Mathematics Seminar 1 Credit Mathematics seminar for majors. To be taken for three semesters. Prerequisite: junior standing. Offered: fall & spring.</p>
<p>MAT 352 Probability & Statistics II 3 Credits Continuation of MAT 351. Introduction to the mathematical aspects of modern probability theory and the theory of statistics. Prerequisite: MAT351. Offered: fall.</p>	<p>MAT 381 Mathematics Seminar 1 Credit Mathematics seminar for majors. To be taken for three semesters. Prerequisite: junior standing. Offered: fall & spring.</p>
<p>MAT 353 Regression Analysis 3 Credits Linear regression and correlation. Covariance, residual sum of squares, residual variance, correlation coefficient, tests of significance for correlation coefficient and for regression coefficients. Non-linear regression. Prerequisite: MAT 351 & MAT 352, or permission of instructor. Offered: spring 2017.</p>	<p>MAT 411 Topology 3 Credits An introduction to topology, stressing concrete examples including surfaces. Point-set, geometric and algebraic topology with interconnections and applications. Prerequisite: MAT 230. Offered: occasionally.</p>
<p>MAT 354 Experimental Design and Statistical Computing 3 Credits Analyzing data; one-way/two-way blocking; chi-square, goodness of fit. Statistical computing package; Monte-Carlo simulation-subset selection, central limit theorem; residual plots. Prerequisite: MAT 351 & MAT 352, or permission of instructor. Offered: spring 2018.</p>	<p>MAT 421 Complex Analysis 3 Credits Complex numbers, analytic functions and mappings. Cauchy-Riemann equations, harmonic functions, Cauchy's theorem, integral formula and inequalities. Power series, residues, singularities and zeros, Rouché's Theorem. Prerequisite: MAT 321. Offered: occasionally.</p>
	<p>MAT 480 Mathematics Seminar 1 Credit Mathematics seminar for majors. To be taken for three semesters. Prerequisite: junior standing. Fulfills College Core: Oral Communication Offered: fall & spring.</p>
	<p>MAT 498 Internship in Mathematics 1-3 Credits Internship involving non-routine tasks linking academic concepts to practical experience. May be used for free elective credit only. Internships require an application and approval by the associate dean. Prerequisite: permission of the chair & associate dean. Offered: occasionally.</p>

MAT 499 Independent Study**1-4 Credits**

Study and work with a faculty supervisor. Project to be determined by faculty agreement. Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

Offered: occasionally.

Medical Laboratory Science

Director: Allyson D. Backstrom, PhD

INTRODUCTION

Medical Laboratory Scientists perform tests to help diagnose and treat disease and maintain wellness. Medical laboratory data is the basis of up to 80 percent of all medical diagnoses. Advances in technology and prescription medical treatment, the mapping of the human genome, and the aging of America's population all contribute to the growing national demand for clinical lab professionals. Our program prepares graduates to analyze human blood, tissues and body fluids which aid in the diagnosis, treatment, and prevention of diseases. Medical Laboratory Scientists conduct such tests as typing and cross matching of blood and blood components, drug monitoring (for therapeutic and illegal drugs), identifying infectious microorganisms and their susceptibility to specific treatments, determining a patient's genetic predisposition to a variety of inherited diseases, and identifying anemias, leukemia and other blood disorders. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Medical Laboratory Science website (<https://www.canisius.edu/academics/programs/medical-laboratory-science>).

The interdisciplinary curriculum of the Medical Laboratory Science major is concentrated in the natural sciences with special emphasis on biology and chemistry. Students take classes on campus for the first three years of the program and spend their senior year in a 51-week hospital based clinical internship. During the clinical internship, students study the full range of clinical laboratory fields including hematology, clinical chemistry, immunology, microbiology, histology and immuno-hematology.

At Canisius, this learning experience is one of quality and value enhanced by small class sizes. The full-time professors you will encounter are trained professionals who hold doctoral degrees in their areas of expertise. During the clinical internship, the faculty will consist of PhDs, pathologists, clinical laboratory scientists, and others recognized for their experience in the various sub-specialties of laboratory medicine.

To be successful in the profession, you must be licensed by the New York State Office of the Professionals. To learn more information about the licensure program please go to the NYSED website (<http://www.op.nysed.gov>).

QUALIFICATIONS

The program is a rigorous one, with very modest flexibility. The course offerings reflect the solid background in the sciences required for the internship experience. During the student's junior year, application is made to accredited hospital schools of medical technology. The burden of acceptance into a hospital program rests with the students. Canisius currently affiliates with the Rochester General Hospital School of Medical Technology (Rochester, NY) and WCA Hospital School of Medical Technology (Jamestown, NY.) Students are enrolled as Canisius students while completing the hospital program. Because this program requires a competitive application into the hospital based clinical year, we recommend

a minimum GPA of at least 3.00 with a strong performance in the upper level sciences.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

(20 courses)

BIO 114 & 114L	Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
BIO 212 & 212L	Biochemistry and Cell Biology II and Biochemistry and Cell Biology Lab II	4
BIO 307 & 307L	Microbiology and Microbiology Laboratory	4
BIO 426 & 426L	Immunochemistry and Immunochemistry Laboratory	4
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 228 & 228L	Organic Chemistry II and Organic Chemistry II Laboratory	4
MAT 141	Inferential Statistics and Computers for Science	4
Science Elective:	Two upper level science courses approved by Director	6-8
MDT 280 & MDT 281	Seminar: Sophomore Level I and Seminar: Sophomore Level II	2

MDT 380 & MDT 381	Seminar: Junior Level I and Seminar: Junior Level II	2	MDT 381 Seminar: Junior Level II Continuation of MDT 380.	1 Credit
MDT 400 & MDT 401	Hospital Rotation: Med Tech I and Hospital Rotation: Med Tech II	30	MDT 400 Hospital Rotation: Med Tech I	15 Credits
Total Credits			88-90	

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Medical Laboratory Science majors will possess the scientific knowledge and laboratory skills to be competent and contributing members of the health-care delivery system. (Science)

Students will:

- **Objective A:** Demonstrate foundational knowledge in inorganic chemistry, organic chemistry, biochemistry, anatomy and physiology, microbiology, immunology, and statistics
- **Objective B:** Understand the components of the diagnostic process and the role of the clinical laboratory; and
- **Objective C:** Perform and interpret results of clinical laboratory tests including: blood bank, urinalysis and other body fluids, chemistry, hematology, immunology, and microbiology.

Student Learning Goal 2

Medical Laboratory Science majors will effectively communicate audience specific medical and scientific information. (Communication)

Students will:

- **Objective A:** Accurately record laboratory results;
- **Objective B:** Effectively communicate laboratory results to others; and
- **Objective C:** Use appropriate information to explain laboratory tests and results.

Student Learning Goal 3

Medical laboratory Science majors will demonstrate professional and ethical behavior. (Professionalism)

Students will:

- **Objective A:** exhibit appropriate patient interaction and confidentiality;
- **Objective B:** Objective B: adhere to safety guidelines and regulations; and
- **Objective C:** demonstrate positive and constructive interactions with peers, medical team, and patients.

MDT 280 Seminar: Sophomore Level I **1 Credit**

Introduction to the Clinical Science Laboratory profession from variety of perspectives: history, present state of health-care delivery, job opportunities, organization of hospital laboratory. Tour of hospital laboratory.

Prerequisite: permission of program director.

MDT 281 Seminar: Sophomore Level II **1 Credit**

Continuation of MDT 280.

Prerequisite: permission of program director.

MDT 380 Seminar: Junior Level I **1 Credit**

Advanced discussions of Clinical Science Laboratory theory and practice designed as preparation for senior-year hospital rotation. Tour of hospital laboratory.

Prerequisite: permission of program director.

MDT 381 Seminar: Junior Level II **1 Credit**

Continuation of MDT 380.

Prerequisite: permission of program director.

MDT 400 Hospital Rotation: Med Tech I **15 Credits**

A year-long, hospital based program. Students learn to perform, develop, evaluate, correlate and assure accuracy and validity of laboratory information in areas such as Clinical Chemistry, Hematology/Hemostasis, Immunology, Immunohematology/Transfusion Medicine, Microbiology, Urine and Body Fluid Analysis; direct and supervise clinical laboratory resources and operations; and collaborate in the diagnosis and treatment of patients.

Prerequisite: acceptance into a hospital-based clinical program.

MDT 401 Hospital Rotation: Med Tech II **15 Credits**

A year-long, hospital based program. Students learn to perform, develop, evaluate, correlate and assure accuracy and validity of laboratory information in areas such as Clinical Chemistry, Hematology/Hemostasis, Immunology, Immunohematology/Transfusion Medicine, Microbiology, Urine and Body Fluid Analysis; direct and supervise clinical laboratory resources and operations; and collaborate in the diagnosis and treatment of patients.

Prerequisite: MDT 400.

Military Science Program (ROTC)

Full-Time Faculty: Major Daniel Gross; Major Stephen Ang; Captain Jeffrey Miles; Master Sergeant Donald Durgin; Master Sergeant B. Alan Payne; Master Sergeant Dwayne Wood; Rebecca M. Sparacino, Lieutenant Colonel (Retired); Gerard Sobchak, Staff Sergeant (Retired); and Sylvia Thomas

The Military Science & Leadership (MLS) Program augments the college learning experience. The cornerstone of the MLS program is the development of leaders. Individual courses support the identification, assessment, and leadership development of young men and women. The goal of the MLS Program is to train confident and competent leaders of character for commissioning as officers in the United States Army, Army Reserve or Army National Guard. Every student taking MLS will learn superior organizational, leadership and managerial skills that will prepare them to lead in public service, business, military, and community organizations. This program is open to students of all majors and there is no requirement for previous military service or experience.

The traditional MLS program is four years: a two-year Basic Course (six credit hours/year), for which no military obligation is incurred, and a two-year Advanced Course (six credit hours/year), plus a US Military History Course (3 credits); for which there is a military obligation.

The **Basic Course** refers to the first and second year of the MSL curriculum.

It is designed as a classroom and lab course that stresses the fundamentals of leadership. A freshman student would enroll in MLS 101 and MLS 111 in the fall and MLS 102 and MLS 112 in the spring. A sophomore would enroll in MLS 201 and 211 in the fall and MLS 202, 212 in the spring. These courses are designed for students who want to improve their leadership. Instructors develop their students' physical, mental and critical thinking skills through team building and collective hands-on problem solving case studies. A number of popular and challenging extra-curricular activities are available for students who take these courses. Students may take up to twelve Basic Course credits without obligation. The basic course sequence is required for all students that want to qualify for entry into the Advanced Course. MLS 210-Basic Camp is held at Fort Knox, KY between either the summer of the student's sophomore and junior year. Basic Camp is a mandatory component for students who have not completed the 100- and 200-level MLS courses/labs. Students, with prior military service may also receive

placement credit directly into the Advanced Course with approval from the Department Chair.

The **Advanced Course** is comprised of MLS 301 & MLS 311, MLS 302 & MLS 312, MLS 401 & MLS 411, MLS 402 & MLS 412, and MLS 480. Upon completion of this sequence and successful completion of Advanced Camp students are commissioned as Second Lieutenants in the Army, Army National Guard or Army Reserve. Based on the students' area of study Military Science 300- and 400- level courses continue to bear free elective credit that may be used toward a student's 120 hours needed to graduate.

For more information students should contact the Military Science Department located on the first floor in the Health Science Building.

MILITARY SCIENCE SUMMER CREDIT

During the summer, students may receive 3 credits for completing MLS 210 at Ft. Knox, KY. CIET is a 29-day training program that is mandatory for all students seeking a Commission. Students must meet all contracting criteria to attend CIET; attendance may occur between either the freshman and sophomore year or sophomore and junior year. For more information on this program, contact the Military Science Department.

Juniors can receive credit for MLS 310 at Ft. Knox, KY during the summer between their junior and senior year. This is a demanding 30-day course designed to increase critical thinking and enhance leadership skills and is mandatory for all Advanced Course ROTC cadets.

Further details are available through the Canisius College Department of Military Science website (<https://www.canisius.edu/academics/programs/rotc-canisius>).

Basic Course (incurring no military obligation)

MLS 101 & MLS 111	Introduction to the Army and Critical Thinking and Leadership Lab	3
MLS 102 & MLS 112	Introduction to Profession of Arms and Leadership Laboratory	3
MLS 201 & MLS 211	Foundations of Leadership and Leadership Laboratory	3
MLS 202 & MLS 212	Foundations of Tactical Leadership and Leadership Laboratory	3

Advanced Course (incurring military obligation)

Student must either complete the Basic Course above or MLS 210 to enter the Advanced Course sequence.

MLS 301 & MLS 311	Adaptive Team Leadership and Advanced Leadership Lab	3
MLS 302 & MLS 312	Applied Team Leadership and Advanced Leadership Lab	3
MLS 401 & MLS 411	Mission Command and the Army Profession and Senior Leadership Laboratory	3
MLS 402 & MLS 412	Mission Command and the Company Grade Officer and Senior Leadership Laboratory	3
MLS 480	U.S. Military History	3

Note: Students are required to sign up and participate in Leadership Labs during the Advanced Course even though they do not receive credit for the labs.

The following sequence of Military Science 100 and 200 level courses can each be counted as a 3.0 credit, free elective:

Freshman	
Fall	Spring
MLS 101 & MLS 111	MLS 102 & MLS 112
Sophomore	
Fall	Spring
MLS 201 & MLS 211	MLS 202 & MLS 212
Junior	
Fall	Spring
MLS 301 & MLS 311	MLS 302 & MLS 312
Senior	
Fall	Spring
MLS 401 & MLS 411	MLS 402 & MLS 412
MLS 480 (may be taken any semester of junior or senior year)	

Note: Students must present Medical Documentation signed by their doctor in order to participate in the lab portion. The required form is available at the Army ROTC department at Canisius College.

MLS 101 Introduction to the Army and Critical Thinking 3 Credits

This course introduces Cadets to the personal challenges and competencies that are critical for effective leadership. Cadets learn how the personal development of life skills such as critical thinking, time management, goal setting, stress management, and comprehensive fitness relate to leadership, and the Army profession. Optional: Leadership Lab; three one-hour physical readiness training (PRT) sessions; one Field Training Exercise (FTX) per semester.

Offered: every fall.

MLS 102 Introduction to Profession of Arms 3 Credits

This course introduces Cadets to the personal challenges and competencies that are critical for adaptive leadership. Cadets learn the basic of the communications process and the importance for leader's to develop the essential skills to effectively communicate in the Army. Students will examine the Army Profession and what it means to be a professional in the US Army. Optional: Leadership Lab; three one-hour PRT sessions; one Joint FTX (JFTX) per semester.

Offered: spring.

MLS 111 Leadership Lab 0 Credits

Students are given opportunities to lead their peers in hands-on training in basic military skills such as land navigation, rifle marksmanship, tactics, drill and ceremony, first aid training and survival swimming.

Prerequisite: Concurrent Enrollment in MLS 101, 102, 201 or 202. All students will be required to provide medical documentation that they are fit to participate in a normal college physical education course. Lab is conducted on Thursday from 3:00-5:00pm every week.

Offered: fall.

- MLS 112 Leadership Laboratory** 0 Credits
Students are given opportunities to lead their peers in hands-on training in basic military skills such as land navigation, rifle marksmanship, tactics, drill and ceremony, first aid training and survival swimming. Lab is conducted on Thursday from 3:00-5:00 pm every week.
Prerequisite: all students will be required to provide medical documentation that states they are fit to participate in a normal college physical education course. **Corequisite:** MLS 101, MLS 102, MLS 201 or MLS 202.
Offered: spring.
- MLS 199 Independent Study** 3 Credits
Students study selected military topics under the supervision of a cadre member.
Prerequisite: permission of the professor of military science.
- MLS 201 Foundations of Leadership** 3 Credits
This course explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework. Aspects of personal motivation and team building are practice planning, executing and assessing team exercises. Optional: leadership labs, three one-hour PRT sessions, one FTX per semester.
Fulfills College Core: Oral Communication
Offered: fall.
- MLS 202 Foundations of Tactical Leadership** 3 Credits
This course examines the challenges of leading teams in the complex operational environment. The course highlights dimensions of terrain analysis, patrolling, and operations orders. Further study of the theoretical basis of the Army Leadership Requirements Model explores the dynamics of adaptive leadership in the context of military operations. Cadets develop greater self awareness as they assess their own leadership styles and practice communication and team building skills. Optional: leadership labs, three one-hour PRT sessions, one JFTX per semester.
Offered: spring.
- MLS 210 Basic Camp** 3 Credits
Required for all students seeking a Commission in the U.S. Army, Army Reserve or Army National Guard; this 29-day course is designed to challenge Cadets mentally, physically and prepare them to meet the challenges of becoming a Commissioned Officer. Basic Camp allows students to enter the ROTC Advanced Course without having taken MLS100 and 200 level courses. Students must be contracted to attend Basic Camp.
Restrictions: students must be approved by the ROTC enrollment officer to register.
Offered: summer.
- MLS 211 Leadership Laboratory** 0 Credits
Students are given opportunities to lead their peers in hands-on training in basic military skills such as land navigation, rifle marksmanship, tactics, drill and ceremony, first aid training and survival swimming. Lab is conducted on Thursday from 3:00-5:00 pm every week.
Prerequisite: all students will be required to provide medical documentation that states they are fit to participate in a normal college physical education course. **Corequisite:** MLS 101, MLS 102, MLS 201 or MLS 202.
- MLS 212 Leadership Laboratory** 0 Credits
Students are given opportunities to lead their peers in hands-on training in basic military skills such as land navigation, rifle marksmanship, tactics, drill and ceremony, first aid training and survival swimming. Lab is conducted on Thursday from 3:00-5:00 pm every week.
Prerequisite: all students will be required to provide medical documentation that states they are fit to participate in a normal college physical education course. **Corequisite:** MLS 101, MLS 102, MLS 201 or MLS 202.
Offered: spring.
- MLS 280 Cultural Understanding and Language Proficiency** 3 Credits
MLS 280 Cultural Understanding and Language Proficiency (CULP) is a 23-day overseas mission in support of Army Service Component Command Security Cooperation Objectives. These cultural awareness missions to provide future leaders with opportunities to develop regional experience and cultural competencies. All Cadets receive cross-cultural training, and select Cadets deploy to locations around the world for experiential cultural awareness training. These deployments – Cadet overseas training missions (COTMs) – develop astute future leaders, while helping build and strengthen strategic relationships. Must be ROTC Contracted Cadet.
Prerequisites: MLS 101.
Offered: every fall.
- MLS 299 Independent Study** 3 Credits
Students study selected military topics under the supervision of a cadre member.
Prerequisite: permission of the professor of military science.
- MLS 301 Adaptive Team Leadership** 3 Credits
This course challenges Cadets to study, practice, and evaluates adaptive leadership skills as they are presented with challenging scenarios related to squad tactical operations. Cadets receive systematic and specific feedback on their leadership attributes and actions. Based on such feedback, as well as their own self-evaluations, Cadets continue to develop their leadership and critical thinking abilities.
Prerequisite: approval of ROTC enrollment officer. **Corequisite:** MLS 311L.
Offered: fall.
- MLS 302 Applied Team Leadership** 3 Credits
This course is an academically challenging course where you will study, practice, and apply the fundamentals of Army Leadership, Officership, Army Values and ethics, personal development, and small unit tactics at the team and squad level. At the conclusion of this course, you will be capable of planning, coordinating, navigating, motivating and leading a team or squad in the execution of a tactical mission.
Prerequisite: approval of ROTC enrollment officer. **Corequisite:** MLS 312.
Offered: spring.
- MLS 310 Advanced Camp** 3 Credits
CLC is a demanding 30 day course held at Fort Knox, KY which is designed to increase critical thinking skills and enhance leadership skills. It is required for all Advanced Course ROTC cadets. In addition to proving their leadership ability, cadets must meet established standards in physical fitness and demonstrate proficiency in military skills.
Offered: summer.
- MLS 311 Advanced Leadership Lab** 0 Credits
Cadets apply basic military skills in small peer learning exercises and small unit training operations. Leadership positions are rotated to solve problems in tactics, land navigation, logistics and crisis reaction. Leadership lab is required for all contracted cadets working to earn a commission.
Prerequisites: MLS 210 or 100- and 200-level MLS courses. **Corequisite:** MLS 301.
Offered: fall.
- MLS 312 Advanced Leadership Lab** 0 Credits
Cadets apply basic military skills in small peer learning exercises and small unit training operations. Leadership positions are rotated to solve problems in tactics, land navigation, logistics and crisis reaction. Leadership lab is required for all contracted cadets working to earn a commission.
Prerequisites: MLS 301 and MLS 311. **Corequisite:** MLS 302.
Offered: spring.

MLS 399 Independent Study 3 Credits

Students study selected military topics under the supervision of a cadre member.

Prerequisite: permission of the professor of military science.

MLS 401 Mission Command and the Army Profession 3 Credits

Mission Command and the Army Profession explore the dynamics of leading in the complex situations of current military operations. You will examine differences in customs and courtesies, military law, principles of war, and rules of engagement in the face of international terrorism. You also explore aspects of interacting with non-government organizations, civilians on the battlefield, the decision making processes and host nation support.

Prerequisites: MLS 301, MLS 302, & MLS 310. **Corequisite:** MLS 411L.

Fulfills College Core: Oral Communication

Offered: fall.

MLS 402 Mission Command and the Company Grade Officer 3 Credits

Mission Command and the Company Grade Officer explore the dynamics of leading in the complex situations during Unified Land Operations I, II, and III. Examine the Art of Command and how to properly communicate with your NCOs and Soldiers during Taking Charge 1, 2 and 3, and Developing Others (counseling). During Cultural Awareness and Cultural Property Protection (CPP), you will discuss numerous situations on how ethical decisions impact personnel and the unit mission. Through the understanding of your roles and responsibilities, you will learn about Comprehensive Soldier Fitness (CSF), Being Ready and Resilient (R2C), and Individual and Family Readiness can assist you in preparing your Soldiers and their Families on reducing and managing stress during times of uncertainty.

Prerequisite: MLS 401. **Corequisite:** MLS 412.

Fulfills College Core: Oral Communication

Offered: spring.

MLS 411 Senior Leadership Laboratory 0 Credits

Under cadre supervision, seniors plan, conduct and evaluate training for the underclass leadership labs. Seniors provide instruction, coaching and mentoring to underclass cadets, and conduct command and staff activities needed to run the cadet battalion. Participate in separate labs to enhance their understanding of Military operations.

Corequisite: MLS 401. **Restriction:** Approval by the ROTC enrollment officer.

Offered: fall.

MLS 412 Senior Leadership Laboratory 0 Credits

Under cadre supervision, seniors plan, conduct and evaluate training for the underclass leadership labs. Seniors provide instruction, coaching and mentoring to underclass cadets, and conduct command and staff activities needed to run the cadet battalion. Participate in separate labs to enhance their understanding of Military operations.

Corequisite: MLS 402. **Restriction:** Approval by the ROTC enrollment officer.

Offered: spring.

MLS 480 U.S. Military History 3 Credits

Explore the evolution of the United States Army from its origins in the Revolutionary War all the way through current operations in Iraq/Afghanistan as well as the Global War on Terrorism. We will discuss in depth the effects the growth of our nation had on the development of a Professional Army. Students will gain an appreciation for the history of the U.S. Military through the study of wars, campaigns and battles while also gaining an understanding of the differences between strategic, operational and tactical levels. Further insight into battles will be taught by reflecting on events utilizing the 9-principles of war as a means of battle analysis. We will also explore the effects politics and international policy has on determining military strategies, also touching on the effects that different cultures/ethnic groups have on both past and present military operations.

MLS 499 Independent Study 3 Credits

Students study selected military topics under the supervision of a cadre member.

Prerequisite: permission of the professor of military science.

Modern Languages, Literatures and Cultures

Chair: Richard Reitsma, PhD

INTRODUCTION

Our primary mission is to instill an awareness of language as an essential element of our thought processes, perceptions, and self-expressions. As recent world events have demonstrated, deep cultural knowledge and linguistic competence are necessary if one wishes to understand other people and their communities. We seek to provide students with the skills and intellectual breadth needed to communicate effectively and to play an active role in today's world. The Department of Modern Languages, Literatures and Cultures offers majors and minors in French, German, Spanish, and Arabic (minor only) as well as instruction in Chinese, Italian, Polish, and American Sign Language. Language study combines uniquely with virtually any major; but of particular interest and practicality are dual majors with International Business and Marketing, International Relations, Bilingual Education, and Biology. Skills in a foreign language are often the deciding factor in an employer's choice between our graduates and equally qualified but monolingual peers. Language majors pursue rewarding careers in social work, international business, government service, teaching, interpreting, and scientific research, to mention but a few of the many exciting possibilities.

Over the course of the semester, each student in the Department of Modern Languages, Literatures and Cultures participates in or attends two cultural events or activities outside regular class time. Please consult the department for a listing of these offerings.

QUALIFICATIONS

Each language course offered in the department must be completed with a grade of C or better in order to proceed to the next level. Any course with a grade of C- or below must be repeated. A placement exam, in combination with high school language experience, IB or AP exam scores, etc. will determine initial placement in the course sequences.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Modern Languages, Literatures and Cultures majors are required to study abroad for a minimum of four consecutive weeks in a formal pre-approved program in the target language. Consultation with a department of Modern Languages, Literatures and Cultures academic advisor is required prior to study abroad.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Additional information about dual majors is provided in the Modern Languages, Literatures, and Cultures curriculum information.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

NATIVE SPEAKER

Students who are native speakers of languages other than English may pursue a major in their native language. These students usually begin at the 300-level language courses.

Native speakers of languages other than English receive a language requirement waiver for other programs requiring a certain level of language proficiency if they are able to provide documentation of their native speaker status. Examples of documents include, but are not limited to, a school diploma received from a country where the language of instruction is not English or an internationally recognized examination certifying language abilities.

MAJORS

The Modern Languages, Literatures, and Cultures Department offers majors in three languages. Study abroad is required for all language majors. There are a variety of study abroad options that are detailed in the description of each major.

- French (p. 188)
- German (p. 191)
- Spanish (p. 194)

The curriculum for a language major may be altered if students are double majoring. All language majors must complete a study abroad experience. Students majoring in two different languages must complete a study abroad experience in both languages.

Curriculum for Students Majoring in a Single Language

Single language majors are required to complete twelve courses in a primary language and four courses in a second language at any level. The requirements are:

Two Intermediate Level (200-level) Courses ¹	6
Three Intermediate-High Level Conversation and Composition Courses	9
Seven Advanced Level Courses	21
Total Credits	36

¹ Students who begin language study at the 300-level may substitute additional electives in lieu of the intermediate (200) level courses. Thus, students will take the same number of courses as other majors.

Curriculum for Students Pursuing Dual Majors Curriculum for Students Majoring in Two Languages

Code	Title	Credits
	Two Intermediate Courses (200-level) in the First Language ¹	6
	Three Intermediate-High Level Conversation and Composition Courses in the First Language	9
	Five Advanced Level Courses in the First Language	15
	Two Intermediate Level Courses (200-level) in the Second Language ¹	6
	Three Intermediate-High Level Conversation and Composition Courses in the Second Language	9
	Three Advanced Level Courses in the Second Language	9
Total Credits		54

¹ Students who begin language study at the 300-level may substitute additional electives in lieu of the intermediate (200) level courses. Thus, students will take the same number of courses as other majors.

Curriculum for Students Double Majoring in a Language and in Education

Code	Title	Credits
	Two Intermediate Level (200-level) Courses ¹	6
	Three Intermediate-High Level Conversation and Composition Courses	9
	Seven Advanced Level Courses	21
Total Credits		36

¹ For students double majoring in a language and Adolescence Education, the 200-level language courses are waived if students start at the 300-level. Thus, students only need 10 language courses to complete the major. For students double majoring in a language and Childhood Education, students must complete a total of 10 language courses. So if students begin at the 300-level credits, they must complete two additional electives in lieu of the 200-level courses.

Curriculum for Students Double Majoring in a Language and in Any Other Discipline (other than another language or Adolescence Education)

Code	Title	Credits
	Two Intermediate Level (200-level) Courses ¹	6
	Three Intermediate-High Level Conversation and Composition Courses	9
	Five Advanced Level Courses	15
Total Credits		30

¹ Students who begin language study at the 300-level may substitute additional electives in lieu of the intermediate (200) level courses. Thus, students will take the same number of courses as other majors.

The language minor is an interdisciplinary program aimed at developing Intermediate language skills and broad cultural understandings. It is designed with flexibility in order to accommodate students' personal and professional interests. Language and cultural studies minors prove to be important assets when seeking employment or applying to graduate schools. It also provides an incentive for students to study in upper division language and literature courses. Students who reach the intermediate level of French, German or Spanish have the opportunity of studying in Argentina, Costa Rica, Cuba, France, Germany, and Spain.

Students must complete six courses for Language and Culture Minor programs in French, German, Spanish and Arabic.

- French (p. 189)
- German (p. 192)
- Spanish (p. 195)
- Arabic (p. 187)

Up to two of these courses can be replaced by two FRC/GER/SPA electives or two approved courses from other departments or two approved courses from study abroad. Pre-approved Internships and Campus Ministry service trips may count toward a minor. All electives from other departments are subject to DMLLC pre-approval, such as courses in PSC, LAS, IR, HIST, or HON.

American Sign Language (ASL) (p. 187)

Arabic (ARBC) (p. 188)

Chinese (CHI) (p. 187)

French (FRC) (p. 189)

German (GER) (p. 192)

Italian (ITA) (p. 187)

Polish (POL) (p. 187)

Portuguese (PORT) (p. 187)

Spanish (SPA) (p. 195)

AMERICAN SIGN LANGUAGE (ASL)

ASL 103 American Sign Language I 3 Credits

Introduction to American Sign Language (ASL), its structure, major grammatical features and language functions. Vocabulary acquisition. Captioning and telecommunication devices. Deaf cultural information. Deaf co-teacher and deaf consultants.

Offered: every fall.

ASL 104 American Sign Language II 3 Credits

Builds on basic American Sign Language (ASL) grammar and conversational skills. Increases expressive/receptive fluency. Linguistic and cultural ASL concepts are expanded and deaf traditions studied. Deaf co-teacher and deaf consultants.

Prerequisite: ASL 103.

Offered: spring.

CHINESE (CHI)

CHI 103 Introductory Chinese I 3 Credits

Reading, writing, listening and speaking. Introduction to Chinese culture. Course aim is for almost exclusive use of Chinese in class.

Offered: occasionally.

CHI 104 Introductory Chinese II 3 Credits

Reading, writing, listening and speaking. Introduction to Chinese culture.

Course aim is for almost exclusive use of Chinese in class.

Prerequisite: minimum grade of C in CHI 103.

Offered: occasionally.

ITALIAN (ITA)

ITA 103 Introductory Italian I 3 Credits

Reading, writing, listening and speaking. Introduction to Italian culture.

Course aim is for almost exclusive use of Italian in class.

Offered: fall.

ITA 104 Introductory Italian II 3 Credits

Continuation of ITA 103. Reading, writing, listening and speaking.

Introduction to Italian culture. Course aim is for almost exclusive use of Italian in class.

Prerequisite: minimum grade of C in ITA 103 or permission of chair.

Offered: spring.

ITA 215 Intermediate Italian 3 Credits

Continued development in writing, listening, speaking and especially reading Italian literary and cultural material. Comprehensive grammar review.

Continued aim of almost exclusive use of Italian in class.

Prerequisite: minimum grade of C in ITA 104.

Offered: occasionally.

POLISH (POL)

POL 102 Survival Polish 1 Credit

Designed specifically for participants in the Campus Ministry annual trip to Poland. The goals for the course are directly related to the environment in which students work: summer camp for children.

Prerequisite: permission of instructor.

Offered: spring.

PORTUGUESE (PORT)

PORT 103 Intro Brazilian Portuguese I 3 Credits

The main purpose of this course is to learn basic Brazilian Portuguese language skills through meaningful conversation and writing exercises in the classroom, to practice speaking and to enjoy learning about the Brazilian culture and people.

Offered: occasionally.

PORT 104 Intro Brazilian Portuguese II 3 Credits

Second in sequence to build on vocabulary and grammar in PORT 103 learning basic Brazilian Portuguese language skills through meaningful conversation and writing exercises in the classroom, to practice speaking and to enjoy learning about the Brazilian culture and people.

Prerequisite: minimum grade of C in PORT 103 or permission of chair.

Offered: occasionally.

Arabic Minor

This minor is temporarily suspended and is not accepting new students.

Required Courses

ARBC 103	Introductory Arabic I	3
ARBC 104	Introductory Arabic II	3
ARBC 215	Advanced-Introductory Arabic I	3
ARBC 217	Advanced-Introductory Arabic II	3
ARBC 323	Intermediate Arabic I	3

ARBC 324	Intermediate Arabic II	3
Total Credits		18

ARBC 103 Introductory Arabic I 3 Credits
Reading, writing, listening and speaking. Introduction to Arabic culture. Course aim is for almost exclusive use of Arabic in class.
Offered: fall.

ARBC 104 Introductory Arabic II 3 Credits
Reading, writing, listening and speaking. Introduction to Arabic culture. Course aim is for almost exclusive use of Arabic in class.
Prerequisite: minimum grade of C in ARBC 103.
Offered: spring.

ARBC 215 Advanced-Introductory Arabic I 3 Credits
Continued development in writing, listening, speaking and especially reading Arabic literary and cultural material. Comprehensive grammar review. Continued aim of almost exclusive use of Arabic in class.
Prerequisite: minimum grade of C in ARBC 104.
Offered: infrequently.

ARBC 217 Advanced-Introductory Arabic II 3 Credits
Continued development in writing, listening, speaking and especially reading Arabic literary and cultural material. Comprehensive grammar review. Continued aim of almost exclusive use of Arabic in class.
Prerequisite: minimum grade of C in both ARBC 104 & ARBC 215.
Offered: infrequently.

ARBC 323 Intermediate Arabic I 3 Credits
This course is an intermediate level course for all students who have completed 12 credits of Arabic language or an equivalent of 12 credits from another institution. The focus of the course is on all four linguistic skills. Also emphasized is the cultural component.
Prerequisite: minimum grade of C in ARBC 217.
Offered: infrequently.

ARBC 324 Intermediate Arabic II 3 Credits
This course is an intermediate level course for all students who have completed 12 credits of Arabic language or an equivalent of 12 credits from another institution. The focus of the course is on all four linguistic skills. Also emphasized is the cultural component.
Prerequisite: minimum grade of C in both ARBC 217 & ARBC 323.
Offered: infrequently.

French

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Single language majors are required to complete twelve courses in a primary language and four courses in a second language at any level. The requirements are:

Intermediate Level Courses

FRC 215	Intermediate French	3
FRC 217	Intermediate French II	3
Intermediate-High Level Conversation and Composition Courses		
FRC 323	Topics in Conversation I	3
FRC 324	French Composition through Literature	3
FRC 332	Substance and Style: Effective Writing in French	3
Advanced Level Courses		
Seven FRC electives		21
FRC 490	French Capstone Project	1
Total Credits		37

If starting at 300-level or its equivalent, two additional electives must be completed.

Study Abroad Requirements

Modern Languages, Literatures and Cultures majors are required to study abroad for a minimum of four consecutive weeks in a formal pre-approved program in the target language. Language majors who choose to spend a semester abroad at a foreign university may count up to three courses as a Modern Language core or elective as long as these courses are taught in the target language and have been pre-approved by the chair of the department of Modern Languages, Literatures and Cultures. Students who spend more than one semester studying at a foreign university may count an additional two courses as a Modern Language core or elective. Dual majors in two languages are required to study abroad for both target languages. Credits for short programs abroad are determined by the number of contact hours. As a general rule, students complete the 200-level sequence or the equivalent and one 300 level course at Canisius College prior to studying at a foreign university. Consultation with a department of Modern Languages, Literatures and Cultures academic advisor is required prior to study abroad. Students must complete at least one course in the major upon return to Canisius College.

Cultural Requirement

Over the course of the semester, each student in the Department of Modern Languages, Literatures and Cultures will participate in or attend two cultural events or activities outside regular class time. Please consult the department for a listing of these offerings.

Dual Majors

French majors often pursue more than one major. Students are encouraged to consult advisors in both majors to determine course sequencing to complete the requirements of both majors.

Curriculum for Students Majoring in Two Languages

Code	Title	Credits
Two Intermediate Courses (200-level) in the First Language ¹		6
Three Intermediate-High Level Conversation and Composition Courses in the First Language		9
Five Advanced Level Courses in the First Language		15
Two Intermediate Level Courses (200-level) in the Second Language ¹		6
Three Intermediate-High Level Conversation and Composition Courses in the Second Language		9
Three Advanced Level Courses in the Second Language		9
Total Credits		54

¹ Students who begin language study at the 300-level may substitute additional electives in lieu of the intermediate (200) level courses. Thus, students will take the same number of courses as other majors.

Curriculum for Students Double Majoring in a Language and in Education

Code	Title	Credits
Two Intermediate Level (200-level) Courses ¹		6
Three Intermediate-High Level Conversation and Composition Courses		9
Seven Advanced Level Courses		21
Total Credits		36

¹ For students double majoring in a language and Adolescence Education, the 200-level language courses are waived if students start at the 300-level. Thus, students only need 10 language courses to complete the major. For students double majoring in a language and Childhood Education, students must complete a total of 10 language courses. So if students begin at the 300-level credits, they must complete two additional electives in lieu of the 200-level courses.

Curriculum for Students Double Majoring in a Language and in Any Other Discipline (other than another language or Adolescence Education)

Code	Title	Credits
Two Intermediate Level (200-level) Courses ¹		6
Three Intermediate-High Level Conversation and Composition Courses		9
Five Advanced Level Courses		15
Total Credits		30

¹ Students who begin language study at the 300-level may substitute additional electives in lieu of the intermediate (200) level courses. Thus, students will take the same number of courses as other majors.

ADDITIONAL COURSE CONSIDERATIONS

Recommended Semester Schedule for Major Course Requirements:

Freshman	
Fall	Spring
FRC 215	FRC 217
Sophomore	
Fall	Spring
FRC 323	FRC 324
	FRC 332
Junior	
Fall	Spring
Study Abroad	FRC elective
Senior	
Fall	Spring
FRC elective	FRC elective
FRC 490	

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

French Language majors will demonstrate effective skills at the ACTFL advanced-low level according to two Communicative Modes: Interpersonal and Presentational. Students Will:

Objective A: Actively and accurately negotiate meaning in fluent interpersonal communications;

Objective B: Accurately and fluently present oral information, concepts and ideas in a cohesive manner to an audience.

Student Learning Goal 2

French Language majors will critically analyze cultural production in the target language.

Students Will:

Objective A: Assess, interpret and assign meaning to numerous types of cultural production including literature, film, essay, and art;

Objective B: Place various types of cultural production in a wider cultural and historical context.

Student Learning Goal 3

French Language majors will design and carry out an original project in which the target language is the major research tool and vehicle of expression.

Students will:

Objective A: Create a project that demonstrates comprehension of cultural productions indicated by a clear thesis and a developed argument;

Objective B: Demonstrate a mastery of information literacy tools and the integration of secondary sources in his/her work.

Intermediate Level Courses

FRC 215	Intermediate French	3
FRC 217	Intermediate French II	3

Intermediate High Level Conversation and Composition Courses

FRC 323	Topics in Conversation I	6
& FRC 324	and French Composition through Literature	
FRC 332	Substance and Style: Effective Writing in French	3

Advanced Low Courses

One FRC elective	3
Total Credits	18

Up to two of these courses can be replaced by two FRC/GER/SPA electives or two approved courses from other departments or two approved courses from study abroad. Pre-approved Internships and Campus Ministry service trips may count toward a minor. All electives from other departments are subject to pre-approval by the chair of the DMLLC.

FRC 103 Introductory French I 3 Credits
Reading, writing, listening and speaking. Introduction to French and francophone cultures. Almost exclusive use of French in class.
Offered: every fall.

FRC 104 Introductory French II 3 Credits
Reading, writing, listening and speaking. Introduction to French and francophone cultures. Almost exclusive use of French in class.
Prerequisite: minimum grade of C in FRC 103 or equivalent (generally two to three years of high school French) or permission of the Chair.
Offered: spring.

- FRC 215 Intermediate French** 3 Credits
This course is designed as a thorough review of grammatical structures. Also emphasized is the building of vocabulary, increasing competence in the four skills (reading, writing, listening and speaking) and gaining an overview of Francophone cultures. Exclusive use of French in class.
Prerequisite: minimum grade of C in FRC 104 or two or three years of high school French.
Offered: fall.
- FRC 217 Intermediate French II** 3 Credits
This course is designed to thoroughly develop the four skills necessary for proficiency in French: reading, writing, listening and speaking. Also emphasized is the building of vocabulary in authentic cultural and literary contexts. Students will be introduced to the discussion of a full-length novel. The class is conducted in French.
Offered: Spring.
- FRC 323 Topics in Conversation I** 3 Credits
Contemporary communication skills emphasized in general exploration of contemporary culture of the Francophone world. Exclusive use of French in class. Phonetics included.
Prerequisite: minimum grade of C in FRC 217.
Offered: fall.
- FRC 324 French Composition through Literature** 3 Credits
Distinguishing and producing effective and personal writing of different types - essays, correspondence, descriptions, self-portraits, and reports - through the analysis of the major literary currents of French literature, its canons, techniques and major contributions. Selected works of prose, poetry, and theater are discussed. Exclusive use of French in class.
Offered: Spring
- FRC 332 Substance and Style: Effective Writing in French** 3 Credits
Distinguishing and producing effective writing of different types: essay, narrative, description, self-portrait, report, curriculum vitae, and correspondence. Exclusive use of French in class.
Prerequisite: minimum grade of C in FRC 217.
Offered: spring.
- FRC 417 The French and Francophone World at Work** 3 Credits
This course will embark on a study of French and francophone working society at large. The practical approach will lead students to develop a series of written and oral artifacts, designed to provide a realistic experience with working in a French context. Interviews, cover letters, CVs, goals and objectives, and negotiation will be practiced. In parallel, the course, which will be conducted entirely in French, will discuss the French and francophone work force in its wide- ranging social and economic facets. The major questions of work time, innovation, legislation, life-work balance, as well as integration in global competition, will be envisioned.
Offered: Fall, every 3 years
- FRC 427 Identities and Globalization** 3 Credits
In the broader context of a globalized world, this course will examine the integration and resistance of identities through a discussion of the institutions of post-war France and the technological developments, and evolution of political structures, with a particular emphasis on current events and contemporary media. This class is entirely conducted in French.
- FRC 433 Survey of French and Francophone Literature** 3 Credits
Selected readings of literary works from France and the Francophone world. Exclusive use of French in class.
Prerequisite: minimum grade of C in both FRC 324 & FRC 332; or permission of the chair.
- FRC 437 French and Francophone History and Culture Through Film I** 3 Credits
Via feature-length films and documentaries, the history and culture of France and the Francophone world are explored. An emphasis is placed on how France's and the Francophone world's history and culture impact its current policies on international relations. Exclusive use of French in class.
Prerequisites: minimum grade of C in both FRC 324 & FRC 332.
- FRC 439 French and Francophone History and Culture Through Film II** 3 Credits
A continuation of FRC 437. Via feature-length films and documentaries, selected topics in contemporary issues of French and Francophone societies are explored. Exclusive use of French in class.
Prerequisite: minimum grade of C in FRC 437.
- FRC 452 Tour de l'Amerique du Nord: Following the French in North America** 3 Credits
Exploration of the rich history of the French in North America from the time of Nouvelle France, La Guerre de la Conquete and Le Grand Derangement (the uprooting of the Acadian People) to the present day reemergence of language reacquisition among the multiple Franco-American communities in the United States.
Prerequisites: minimum grade of C in each of FRC 323, FRC 324, & FRC 332.
- FRC 453 War and Memory** 3 Credits
Exploration of the events of World War II and the Occupation of France and their major role in the cultural and economic forces at work in contemporary France. Students will discuss particularly the mentality and demeanor of the French, the permanent and evolving traits of French society and the grounding of French culture.
Prerequisite: minimum grade of C in each of FRC 323, FRC 324, & FRC 332.
- FRC 454 Heritages Francophones** 3 Credits
Examination of the Francophone cultures in the United States and Canada. The communities explored include descendants of Acadians in the St. John Valley of Maine and the maritime provinces of Canada; the Cajun populations of Louisiana; the Haitian community in Miami; and the immigrants from Africa, Asia, and Europe.
Prerequisites: minimum grade of C in each of FRC 323, FRC 324, & FRC 332.
- FRC 490 French Capstone Project** 1 Credit
Graduating majors will collect a portfolio of their work during their time at Canisius. Students will summarize their experience of studying Spanish through a 5-10 page reflective paper (written in the target language) discussing the progress they have made in skills (reading, writing, speaking, listening) and knowledge (culture). Students will also summarize how their knowledge of Spanish will impact their futures (graduate school, year of service, career, community, personal life). In this reflection, students should also synthesize the three areas of extracurricular experience and their impact on their skills and cultural knowledge: A) Study Abroad; B) Service Learning, Internships/Volunteer sites; C) Cultural Activities. Students should also critique the program, and suggest improvements to curriculum. The final project will conclude with an oral presentation of the above, with Q&A, for peers and faculty. This course will be required of all graduating majors entering AY 17/18 (graduation 2021 and later). Current students are strongly encouraged to register.
Offered: every fall and spring semester.

FRC 499 Independent Study**3 Credits**

Independent study requires permission of the chair and associate dean. Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

German

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Single language majors are required to complete twelve courses in a primary language and four courses in a second language at any level. The requirements are:

Intermediate Level Courses

GER 215 & GER 216	Intermediate German I and Intermediate German II	6
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Intermediate-High Level Conversation and Composition Courses

Take four courses from the following list		12
GER 323	Topics in Conversation I	
GER 324	Topics in Conversation II	
GER 331	Substance and Style: Effective Writing in German I	
GER 332	Substance and Style: Effective Writing in German II	
GER 341	German for Business I	
GER 342	German for Business II	

Advanced Courses

Six GER electives (400-level)		18
GER 490	German Capstone Project	1
Total Credits		37

If starting at 300-level or its equivalent, two additional electives must be completed.

Study Abroad Requirements

Modern Languages, Literatures and Cultures majors are required to study abroad for a minimum of four consecutive weeks in a formal pre-approved program in the target language. Language majors who choose to spend a semester abroad at a foreign university may count up to three courses as a Modern Language core or elective as long as these courses are taught in the target language and have been pre-approved by the chair of the department of Modern Languages, Literatures and Cultures. Students who spend more than one semester studying at a foreign university may count an additional two courses as a Modern Language core or elective. Dual majors in two languages are required to study abroad for both target languages. Credits for short programs abroad are determined by the number of contact hours. As a general rule, students complete the 200-level sequence or the

equivalent and one 300 level course at Canisius College prior to studying at a foreign university. Consultation with a department of Modern Languages, Literatures and Cultures academic advisor is required prior to study abroad. Students must complete at least one course in the major upon return to Canisius College.

Cultural Requirement

Over the course of the semester, each student in the Department of Modern Languages, Literatures and Cultures will participate in or attend two cultural events or activities outside regular class time. Please consult the department for a listing of these offerings.

Dual Majors

German majors often pursue more than one major. Students are encouraged to consult advisors in both majors to determine course sequencing to complete the requirements of both majors.

Curriculum for Students Majoring in Two Languages

Code	Title	Credits
Two Intermediate Courses (200-level) in the First Language ¹		6
Three Intermediate-High Level Conversation and Composition Courses in the First Language		9
Five Advanced Level Courses in the First Language		15
Two Intermediate Level Courses (200-level) in the Second Language ¹		6
Three Intermediate-High Level Conversation and Composition Courses in the Second Language		9
Three Advanced Level Courses in the Second Language		9
Total Credits		54

¹ Students who begin language study at the 300-level may substitute additional electives in lieu of the intermediate (200) level courses. Thus, students will take the same number of courses as other majors.

Curriculum for Students Double Majoring in a Language and in Education

Code	Title	Credits
Two Intermediate Level (200-level) Courses ¹		6
Three Intermediate-High Level Conversation and Composition Courses		9
Seven Advanced Level Courses		21
Total Credits		36

¹ For students double majoring in a language and Adolescence Education, the 200-level language courses are waived if students start at the 300-level. Thus, students only need 10 language courses to complete the major. For students double majoring in a language and Childhood Education, students must complete a total of 10 language courses. So if students begin at the 300-level credits, they must complete two additional electives in lieu of the 200-level courses.

Curriculum for Students Double Majoring in a Language and in Any Other Discipline (other than another language or Adolescence Education)

Code	Title	Credits
Two Intermediate Level (200-level) Courses ¹		6
Three Intermediate-High Level Conversation and Composition Courses		9

Five Advanced Level Courses	15
Total Credits	30

¹ Students who begin language study at the 300-level may substitute additional electives in lieu of the intermediate (200) level courses. Thus, students will take the same number of courses as other majors.

ADDITIONAL COURSE CONSIDERATIONS

Recommended Semester Schedule for Major Course Requirements:

Freshman

Fall	Spring
GER 215	GER 216

Sophomore

Fall	Spring
Take one of the following:	Take one of the following:
GER 323	GER 324
GER 331	GER 332
GER 341	GER 342

Junior

Fall	Spring
GER elective	Study Abroad

Take one of the following:

GER 323
GER 331
GER 341

Senior

Fall	Spring
GER elective	GER elective

Take one of the following:

GER 323
GER 331
GER 341

GER 490

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

German Language majors will demonstrate effective skills at the ACTFL advanced-low level according to two Communicative Modes: Interpersonal and Presentational. Students will:

Objective A: Actively and accurately negotiate meaning in fluent interpersonal communications;

Objective B: Accurately and fluently present oral information, concepts and ideas in a cohesive manner to an audience.

Student Learning Goal 2

German Language majors will critically analyze cultural production in the target language.

Students will:

Objective A: Assess, interpret and assign meaning to numerous types of cultural production including literature, film, essay, and art;

Objective B: Place various types of cultural production in a wider cultural and historical context.

Student Learning Goal 3

German Language majors will design and carry out an original project in which the target language is the major research tool and vehicle of expression.

Students will:

Objective A: Create a project that demonstrates comprehension of cultural productions indicated by a clear thesis and a developed argument;

Objective B: Demonstrate a mastery of information literacy tools and the integration of secondary sources in his/her work.

Student Learning Goal 4

German Language majors will demonstrate familiarity with the chronology and major figures, events, and themes in Germany's triple history since 1949 (frg - gdr - united Germany after unification).

Students will:

Objective A: Situate people, events, and/or themes in their appropriate context of German's triple history since 1949;

Objective B: Demonstrate clear awareness of change and continuity within the history of Germany since 1949.

Intermediate Level Courses

GER 215 & GER 216	Intermediate German I and Intermediate German II	6
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Intermediate-High Level Conversation and Composition Courses

Take 4 of the following 6 courses		12
GER 323	Topics in Conversation I	
GER 324	Topics in Conversation II	
GER 331	Substance and Style: Effective Writing in German I	
GER 332	Substance and Style: Effective Writing in German II	
GER 341	German for Business I	
GER 342	German for Business II	

Total Credits 18

Up to two of these courses can be replaced by two FRC/GER/SPA electives or two approved courses from other departments or two approved courses from study abroad. Pre-approved Internships and Campus Ministry service trips may count toward a minor. All electives from other departments are subject to pre-approval by the chair of the DMLLC.

GER 103 Introductory German I 3 Credits
Reading, writing, listening, and speaking. Introduction to German culture. Almost exclusive use of German in class.
Offered: every fall.

GER 104 Introductory German II 3 Credits
Reading, writing, listening, and speaking. Introduction to German culture. Almost exclusive use of German in class.
Prerequisite: minimum grade of C in GER 103.
Offered: every spring.

- GER 215 Intermediate German I** 3 Credits
This course is designed as a thorough review of grammatical structures. Also emphasized is the building of vocabulary, increasing competence in the four skills (reading, writing, listening and speaking) and gaining an overview of German culture. Exclusive use of German in class.
Prerequisite: minimum grade of C in GER 104 or two or three years of high school German.
Offered: every fall.
- GER 216 Intermediate German II** 3 Credits
This course is designed as a thorough review of grammatical structures. Also emphasized is the building of vocabulary, increasing competence in the four skills (reading, writing, listening and speaking) and gaining an overview of German culture. Exclusive use of German in class.
Prerequisite: minimum grade of C in GER 215 or permission of chair.
Offered: every spring.
- GER 323 Topics in Conversation I** 3 Credits
Contemporary communication skills emphasized in general exploration of contemporary culture of the German-speaking world. Exclusive use of German in class. Phonetics may be included.
Prerequisite: minimum grade of C in GER 216 or permission of the DMLLC chair.
Offered: fall of even-numbered years.
- GER 324 Topics in Conversation II** 3 Credits
A continuation of GER 323. Exclusive use of German in class. Language lab required.
Prerequisite: minimum grade of C in GER 216 or permission of the DMLLC chair.
Offered: spring of odd-numbered years.
- GER 331 Substance and Style: Effective Writing in German I** 3 Credits
Distinguishing and producing effective writing of different types: essay, correspondence, description, report. Exclusive use of German in class.
Prerequisite: minimum grade of C in GER 216.
Offered: fall 2019.
- GER 332 Substance and Style: Effective Writing in German II** 3 Credits
A continuation of GER 331. Exclusive use of German in class.
Prerequisite: minimum grade of C in GER 331.
Offered: spring 2020.
- GER 341 German for Business I** 3 Credits
Advanced aural/oral and writing skills needed for working in a German speaking environment. Practical situations, technical vocabulary, and correspondence highlighted. Preparation for Wirtschaftsdeutsch International Examination. Exclusive use of German in class.
Prerequisite: minimum grade of C in GER 324 or GER 332.
Offered: fall 2017.
- GER 342 German for Business II** 3 Credits
Advanced aural/oral and writing skills needed for working in a German speaking environment. Practical situations, technical vocabulary, and correspondence highlighted. Preparation for Wirtschaftsdeutsch International Examination.
Prerequisite: minimum grade of C in GER 341.
Offered: spring 2018.
- GER 400 German Internship** 3 Credits
Qualified students are placed in jobs or service programs where they will use and perfect language skills.
Prerequisite: permission of chair.
- GER 441 The Young Generation and Civil Courage - 1848 to today** 3 Credits
A detailed look at Germany's young generation between revolutionary and nationalistic attitudes, between resistance to and acceptance of the body politic: 1848 - 1871 - 1914 - 1939 - 1945 - 1957 - 1968 - 1989.
Prerequisites: C or better in a 300-level German class or permission of instructor.
Offered: fall 2017.
- GER 445 German Customs and Traditions** 3 Credits
A close look at the customs and traditions which are still relevant in a modern Germany and continue to serve as the undeniable foundation of the national fabric of Germany in the age of migration and multiculturalism.
Prerequisites: C or better in a 300-level German class or permission of instructor.
Offered: fall 2019.
- GER 453 German Literature after 1945** 3 Credits
A thorough inquiry into aspects of literary life in both parts of Germany before and after 1990. Reflection on the attempts by East and West German authors to distance themselves from and cope with the experience of the literature of the NAZI era.
Prerequisites: C or better in a 300-level German class or permission of instructor.
Offered: spring 2018.
- GER 455 The Weimar Republic: Culture and Literature** 3 Credits
A close look at "roaring twenties" in Weimar Berlin and Germany, their cultural significance and place in the history of Germany between World War I and the "3rd Reich". All aspects of the cultural progression are studied - from architecture to film, from literature to music.
Prerequisites: C or better in a 300-level German class or permission of instructor.
Offered: spring 2020.
- GER 465 1968 in the European Context** 3 Credits
A comparison between the two major student movements in Europe, France and Germany, and their enduring impact during the late 1980s, culminating in the fall of the Berlin Wall on November 9, 1989. Movements in Poland, Hungary, Czechoslovakia, and the German Democratic Republic will be studied, as well.
Prerequisites: C or better in a 300-level German class or permission of instructor.
Offered: fall 2018.
- GER 467 Germany since 1871 - Political System and Form of Government** 3 Credits
A close look at the seven forms of government Germany experienced since her first unification: Monarchy (1871-1918), Weimar democracy (1918-1933), national socialism (1933-1945), under occupation (1945-1949), Western democracy (1949-1989), communism (1949-1989), and federation (1990-today).
Prerequisites: C or better in a 300-level German class or permission of instructor.
Offered: fall 2016.
- GER 472 Contemporary German Film** 3 Credits
Concentration on most recent and highly rated film productions for the big screen and for television. Special attention is given to female film makers and those with a multi-cultural background.
Prerequisites: C or better in a 300-level German class or permission of instructor.
Offered: spring 2019.

GER 475 The History of German Film since Weimar 3 Credits

A close look at the cinema of Weimar (UFA), cinema as propaganda machine under Hitler, West-Germany's cinema of restoration and the manifesto of Oberhausen; East-Germany's multi-faceted DEFA film-making, and the trends of post-unification cinema within Europe.

Prerequisites: C or better in a 300-level German class or permission of instructor.

Offered: spring 2017.

GER 490 German Capstone Project 1 Credit

Graduating majors will collect a portfolio of their work during their time at Canisius. Students will summarize their experience of studying Spanish through a 5-10 page reflective paper (written in the target language) discussing the progress they have made in skills (reading, writing, speaking, listening) and knowledge (culture). Students will also summarize how their knowledge of Spanish will impact their futures (graduate school, year of service, career, community, personal life). In this reflection, students should also synthesize the three areas of extracurricular experience and their impact on their skills and cultural knowledge: A) Study Abroad; B) Service Learning, Internships/Volunteer sites; C) Cultural Activities. Students should also critique the program, and suggest improvements to curriculum. The final project will conclude with an oral presentation of the above, with Q&A, for peers and faculty. This course will be required of all graduating majors entering AY 17/18 (graduation 2021 and later). Current students are strongly encouraged to register.

Offered: every fall and spring semester.

Spanish

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Single language majors are required to complete twelve courses in a primary language and four courses in a second language at any level. The requirements are:

Intermediate Level Courses

SPA 215	Intermediate Spanish	3
SPA 217	Introduction to Spanish Composition	3

Intermediate-High Level Conversation and Composition Courses

SPA 323	Topics in Conversation I: Peninsular Culture and Conversation ¹	3
SPA 324	Topics in Conversation II: Latin American Culture and Civilization ¹	3
SPA 332	Advanced Spanish Composition ¹	3

Advanced Courses

Seven SPA electives		21
SPA 490	Spanish Capstone Portfolio Project	1

Total Credits 37

¹ SPA 350 may be taken in lieu of SPA 323, SPA 324, or SPA 332 toward the major or minor, or to fulfill a prerequisite for a 400-level course.

If starting at 300-level or its equivalent, two additional electives must be completed.

Study Abroad Requirements

Modern Languages, Literatures and Cultures majors are required to study abroad for a minimum of four consecutive weeks in a formal pre-approved program in the target language. Language majors who choose to spend a semester abroad at a foreign university may count up to three courses as a Modern Language core or elective as long as these courses are taught in the target language and have been pre-approved by the chair of the department of Modern Languages, Literatures and Cultures. Students who spend more than one semester studying at a foreign university may count an additional two courses as a Modern Language core or elective. Dual majors in two languages are required to study abroad for both target languages. Credits for short programs abroad are determined by the number of contact hours. As a general rule, students complete the 200-level sequence or the equivalent and one 300 level course at Canisius College prior to studying at a foreign university. Consultation with a department of Modern Languages, Literatures and Cultures academic advisor is required prior to study abroad. Students must complete at least one course in the major upon return to Canisius College.

Cultural Requirement

Over the course of the semester, each student in the Department of Modern Languages, Literatures and Cultures will participate in or attend two cultural events or activities outside regular class time. Please consult the department for a listing of these offerings.

Dual Majors

Spanish majors often pursue more than one major. Students are encouraged to consult advisors in both majors to determine course sequencing to complete the requirements of both majors.

Curriculum for Students Majoring in Two Languages

Code	Title	Credits
Two Intermediate Courses (200-level) in the First Language ¹		6
Three Intermediate-High Level Conversation and Composition Courses in the First Language		9
Five Advanced Level Courses in the First Language		15
Two Intermediate Level Courses (200-level) in the Second Language ¹		6
Three Intermediate-High Level Conversation and Composition Courses in the Second Language		9
Three Advanced Level Courses in the Second Language		9
Total Credits		54

¹ Students who begin language study at the 300-level may substitute additional electives in lieu of the intermediate (200) level courses. Thus, students will take the same number of courses as other majors.

Curriculum for Students Double Majoring in a Language and in Education

Code	Title	Credits
Two Intermediate Level (200-level) Courses ¹		6
Three Intermediate-High Level Conversation and Composition Courses		9

Seven Advanced Level Courses	21
Total Credits	36

¹ For students double majoring in a language and Adolescence Education, the 200-level language courses are waived if students start at the 300-level. Thus, students only need 10 language courses to complete the major. For students double majoring in a language and Childhood Education, students must complete a total of 10 language courses. So if students begin at the 300-level credits, they must complete two additional electives in lieu of the 200-level courses.

Curriculum for Students Double Majoring in a Language and in Any Other Discipline (other than another language or Adolescence Education)

Code	Title	Credits
Two Intermediate Level (200-level) Courses ¹		6
Three Intermediate-High Level Conversation and Composition Courses		9
Five Advanced Level Courses		15
Total Credits		30

¹ Students who begin language study at the 300-level may substitute additional electives in lieu of the intermediate (200) level courses. Thus, students will take the same number of courses as other majors.

ADDITIONAL COURSE CONSIDERATIONS

Recommended Semester Schedule for Major Course Requirements. Please note that the following road map shows a typical progression for students that begin the SPA major with SPA 215. Students who start at a different level or who are double-majoring should meet with the chair to plan their course of studies.

Freshman		
Fall		Spring
SPA 215		SPA 217
Sophomore		
Fall		Spring
SPA 323		SPA 324
		SPA 332
Junior		
Fall		Spring
Study Abroad ¹		SPA elective ²
		SPA elective ²
Senior		
Fall		Spring
SPA elective ²		SPA elective ²
SPA 490		

¹ Students should meet with the chair to plan course schedules for their study abroad and how those courses count toward the student's SPA major.

² Students should meet with the chair to determine which courses may be counted as SPA electives for the major

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Spanish Language majors will demonstrate effective skills at the ACTFL advanced-low level according to two Communicative Modes: Interpersonal and Presentational. Students will:

- **Objective A:** Actively and accurately negotiate meaning in fluent interpersonal communications.
- **Objective B:** Accurately and fluently present oral information, concepts and ideas in a cohesive manner to an audience.

Student Learning Goal 2

Spanish Language majors will critically analyze cultural production in the target language. Students will:

- **Objective A:** Assess, interpret and assign meaning to numerous types of cultural production including literature, film, essay, and art.
- **Objective B:** Place various types of cultural production in a wider cultural and historical context.

Student Learning Goal 3

Spanish Language majors will design and carry out an original project in which the target language is the major research tool and vehicle of expression. Students will:

- **Objective A:** Create a project that demonstrates comprehension of cultural productions indicated by a clear thesis and a developed argument.
- **Objective B:** Demonstrate a mastery of information literacy tools and the integration of secondary sources in his/her work.

Intermediate Level Courses

SPA 215	Intermediate Spanish	3
SPA 217	Introduction to Spanish Composition	3

Intermediate High Level Conversation and Composition Courses

SPA 323	Topics in Conversation I: Peninsular Culture and Conversation ¹	3
SPA 324	Topics in Conversation II: Latin American Culture and Civilization ¹	3
SPA 332	Advanced Spanish Composition ¹	3

Advanced Low Courses

One SPA elective	3
Total Credits	18

¹ SPA 350 may be taken in lieu of SPA 323, SPA 324, or SPA 332 toward the major or minor, or to fulfill a prerequisite for a 400-level course.

Up to two of these courses can be replaced by two FRC/GER/SPA electives or two approved courses from other departments or two approved courses from study abroad. Pre-approved Internships and Campus Ministry service trips may count toward a minor. All electives from other departments are subject to pre-approval by the chair of the DMLLC.

SPA 103 Introductory Spanish I **3 Credits**
 Reading, writing, listening and speaking. Introduction to Hispanic culture. Almost exclusive use of Spanish in class.
Offered: every fall.

- SPA 104 Introductory Spanish II** 3 Credits
Reading, writing, listening and speaking. Introduction to Hispanic culture. Almost exclusive use of Spanish in class.
Prerequisite: minimum grade of C in SPA 103 or equivalent or permission of chair.
Offered: fall & spring.
- SPA 215 Intermediate Spanish** 3 Credits
Building on grammar and vocabulary learned in 103 & 104, this course continues the focus on grammar and vocabulary and increasing competence in the four linguistic skills and gaining an overview of Hispanic cultures. Emphasizing writing and speaking. Exclusive use of Spanish in class.
Prerequisite: minimum grade of C in SPA 104 or equivalent or permission of chair.
Offered: fall & spring.
- SPA 217 Introduction to Spanish Composition** 3 Credits
The first of two composition courses designed as a thorough review of grammatical structures, with a focus on Spanish composition and translation at the intermediate level. Heavy use of GoogleDocs. Also emphasized is the building of vocabulary, increasing competence in the four linguistic skills and gaining an overview of Hispanic cultures. Exclusive use of Spanish in class.
Prerequisite: minimum grade of C in SPA 215 or equivalent or permission of chair.
Offered: fall & spring.
- SPA 323 Topics in Conversation I: Peninsular Culture and Conversation** 3 Credits
One of 2 non-sequential conversation courses. Contemporary communication skills emphasized in general exploration of contemporary culture of Spain. Exclusive use of Spanish in class. Weekly conversation with peers in Latin America via Skype (Dual Immersion).
Prerequisite: minimum grade of C in SPA 217 or equivalent or permission of chair.
Offered: fall.
- SPA 324 Topics in Conversation II: Latin American Culture and Civilization** 3 Credits
One of 2 non-sequential conversation courses. Contemporary communication skills emphasized in general exploration of contemporary culture of Latin America. Exclusive use of Spanish in class. Weekly conversation with peers in Latin America via Skype (Dual Immersion).
Prerequisite: minimum grade of C in SPA 217 or equivalent or permission of chair.
Offered: spring.
- SPA 332 Advanced Spanish Composition** 3 Credits
Distinguishing and producing effective writing based on short stories and short films. Exclusive use of Spanish in class.
Prerequisite: minimum grade of C in SPA 217 or equivalent or permission of chair.
Offered: spring.
- SPA 350 Spanish for Business** 3 Credits
This online course is designed to give students with advanced-intermediate and advanced levels of proficiency in Spanish a solid foundation in business vocabulary, basic cultural concepts, and situational practice. It seeks to develop intercultural communicative competence for business purposes based on social values and conventions that shape everyday interaction conducted within a given society.
Prerequisites: at least 1 course at 300-level (third year Spanish) completed with a B overall average.
Offered: spring 2017.
- SPA 399 Seminar in Argentina** 3 Credits
Offered exclusively in Argentina during Winter Break for 3 weeks. Open to all majors in need of 100, 200, 300 or 400-level SPA courses. Satisfies the Study Abroad Requirement.
Prerequisite: permission of instructor.
Offered: occasionally during winter break, currently anticipated winter 2017.
- SPA 400 Spanish Internship** 1-3 Credits
Professional Internship. Includes Family Home Stays, excursions, and internships. Open to ALL majors, though intermediate Spanish knowledge expected.
Prerequisite: permission of the department chair & associate dean.
- SPA 401 Spanish Internship Costa Rica** 1-3 Credits
Professional Internship in Costa Rica. Includes Family Home Stays, excursions, and internships. Open to ALL majors, though intermediate Spanish knowledge expected.
Prerequisite: permission of the department chair & associate dean.
Corequisite: SPA 403.
Offered: exclusively in Costa Rica for 5 weeks during summers of odd-numbered years.
- SPA 403 Spanish for the Professions (Costa Rica)** 3 Credits
Language classes at intermediate or advanced level for students participating in the study abroad program in Costa Rica. Includes Family Home Stays, excursions, and internships. Open to ALL majors, though intermediate Spanish knowledge expected.
Prerequisite: minimum grade of C in intermediate or advanced Spanish or equivalents, & permission of instructor. **Corequisite:** SPA 401.
Offered: exclusively in Costa Rica for 5 weeks during summers of odd-numbered years.
- SPA 405 Spanish Literary Myths** 3 Credits
A focus on the construction of three Spanish and French literary myths: Don Quixote, Don Juan and Carmen. Students will study its original sources, development, transformation, and historic interpretation, as well as its contemporary versions based on literature, visual arts and music. Exclusive use of Spanish in class.
Prerequisite: minimum grade of C in two of the following courses: SPA 323, SPA 324, SPA 217, SPA 332 or permission of chair.
Offered: spring 2019.
- SPA 406 History & Politics in Cuba** 3 Credits
Seminar offered exclusively in Cuba usually during even numbered summers. Open to ALL majors, though some knowledge of Spanish expected. Credit can apply to IR, IB, HON, with permission. Family home stays and excursions. Taken in conjunction with 'Cuban Cinema of the Revolution' for an additional 3 credits.
Prerequisite: permission of instructor; some level of Spanish helpful.
Corequisite: SPA 456. **Restriction:** involves travel to Cuba.
Offered: usually summers of even-numbered years.
- SPA 420 Personal Narrative: Understanding Reality and the Self in Contemporary Spanish Narrative.** 3 Credits
An examination of cultural themes (identities, stereotypes, customs and traditions) in the essayist work of the best contemporary Spanish writers: Lucía Etxebarria, Javier Marías, Juan José Millás, Rosa Montero, Soledad Puértolas, Rosa Regás, and Manuel Vincent. Emphasis on vocabulary building and idiomatic structure of the language. Exclusive use of Spanish in class.
Prerequisite: minimum grade of C in two of the following courses: SPA 323, SPA 324, & SPA 332; or permission of chair/instructor.
Offered: occasionally in spring.

SPA 436 Detective Fiction: Murderous Seduction 3 Credits

Explores the detective novel and film in Spain and Latin America focusing on socio-political interpretations & cultural contexts, the characteristics of the genre, motivations for writing/reading such fiction, and the classification of this fiction as low/high-brow. We will also explore the deconstruction of the genre and the detective novel as self-parody. Exclusive use of Spanish in class.

Prerequisite: minimum grade of C in two of the following courses: SPA 323, SPA 324, & SPA 332; or permission of chair/instructor.

Offered: occasionally in fall.

SPA 453 Almodóvar and La Movida: The Films of Pedro Almodóvar 3 Credits

Exploration of the transgressive, revolutionary, titillating films of Pedro Almodóvar and the birth of a new Spain after the death of Franco, tracing the trajectory and development of his cinematic narrative technique from his earliest films to his more recent films, exploring the excoriation of class, gender, sexuality, politics, and identity in his oeuvre. Exclusive use of Spanish in class.

Prerequisite: C or better in SPA 323, SPA 324, SPA 332 OR approval of instructor.

Offered: occasionally in fall.

SPA 455 Spanish Short Fiction 3 Credits

A study of Spanish short-short literary fiction, Almodóvar's cinematography and graffiti art as expressions of Postmodern high and low cultures. Exclusive use of Spanish in class.

Prerequisites: minimum grade of C in two of the following courses: SPA 323, SPA 324, & SPA 332, or permission of chair.

Offered: spring 2018.

SPA 456 Cuban Cinema of the Revolution 3 Credits

This course explores how film is politically charged in Cuba. How do directors work around and within the Cuban government's censorship to critique the Revolution as well as balance that critique with a love for the country and its people? Addresses how countryside and Havana are not just architecture or geography, but characters in their own right. Explores issues of race, gender, sexuality, class, and religion within Cuba and the exile community.

Prerequisite: C or better in SPA 217 or SPA 332, and SPA 323 or SPA 324, or permission of instructor. This course is a prerequisite for SPA 457: Cuba Immersion Experience, held in January (unless instructor permission).

SPA 459 The Body Erotic/The Body Politic: Sexuality as Political Discourse in Latin America and Spain 3 Credits

Explores how 'deviant' sexuality (homosexuality, lesbianism, incest, and miscegenation) are used as political discourse in contexts where political dialogue is restricted. Examines how art deals with issues of the sexual body in terms of the political body, exploring the political uses of the body as well as the sexualization of the political. Exclusive use of Spanish in class.

Prerequisite: minimum grade of C in two of the following courses: SPA 323, SPA 324, & SPA 332; or permission of chair/instructor.

Offered: occasionally in fall.

SPA 460 Lorca and his Époque 3 Credits

An examination of Spain's Generation of '27 as a cultural vanguard of the 20th century. Emphasis on multidisciplinary oeuvre by Federico García Lorca and his closest circle of friends: Salvador Dalí, Luis Buñuel and Manuel de Falla.

Prerequisites: minimum grade of C in two of the following courses: SPA 323, SPA 324, & SPA 332; or permission of chair/instructor.

Offered: spring 2017.

SPA 490 Spanish Capstone Portfolio Project 1 Credit

Graduating majors will collect a portfolio of their work during their time at Canisius. Students will summarize their experience of studying Spanish through a 5-10 page reflective paper (written in the target language) discussing the progress they have made in skills (reading, writing, speaking, listening) and knowledge (culture). Students will also summarize how their knowledge of Spanish will impact their futures (graduate school, year of service, career, community, personal life). In this reflection, students should also synthesize the three areas of extracurricular experience and their impact on their skills and cultural knowledge: A) Study Abroad; B) Service Learning, Internships/Volunteer sites; C) Cultural Activities. Students should also critique the program, and suggest improvements to curriculum. The final project will conclude with an oral presentation of the above, with Q&A, for peers and faculty. This course will be required of all graduating majors entering AY 17/18 (graduation 2021 and later). Current students are strongly encouraged to register.

Offered: every fall and spring semester.

SPA 499 Independent Study 1-6 Credits

Study and work with a faculty supervisor. Project to be determined by faculty agreement. Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

Philosophy

Chair: Michael Forest, PhD

INTRODUCTION

Philosophy probes into some of the deepest questions of human life. What is the nature of reality? What is truth? What is happiness? What is justice? The philosophy curriculum explores these — and many other — fundamental questions and helps students to formulate reasonable answers to these questions.

A CORNERSTONE OF JESUIT EDUCATION

Philosophy has been a cornerstone of Jesuit education since the founding of the first Jesuit colleges and universities in 17th century Europe. Educators at Jesuit colleges and universities in the United States continue to recognize the special province of philosophy to: Embrace our human powers to think abstractly and thus to cultivate models of mental discipline and to broaden our capacities to understand and to enjoy living. Raise critical questions and use reasoned argumentation to develop normative standards for guiding a person's relationship to his/her community. Promote reasoning about human nature and human values to help provide bridges between religious belief and contemporary intellectual directions. Value integrity, commitment to truth, excellence and understanding with an aim to enhance our expressive powers, our knowledge, foresight and sense of direction. Philosophy is an especially ennobling discipline since it elevates what is common in being human while also nurturing individuality and self-esteem. Studying philosophy helps to cultivate responsible citizenship by promoting thoughtful reflection on contemporary cultural and intellectual currents, by critically assessing the discourse of public officials, and by identifying unfounded assertions and biased opinions with an aim to replace them with responsibly reasoned argumentation. Consequently, philosophy holds a special place in a liberal arts curriculum at a Jesuit college or university just in its capacity to objectify the human condition and to contribute to our becoming more fully human.

DEPARTMENT MISSION

To fulfill its Ignatian mission, the Philosophy faculty provides programs of instruction to cultivate an abiding sense of responsibility as men and women for and with others by focusing on the service of faith and the promotion of justice. The faculty considers it crucially important that a good education addressing such concerns has a firm foundation in the history of philosophy and its principal branches, and the issues of moral philosophy, together with special attention to examining argumentation. Equally important is the Philosophy faculty's interest cultivating discussion about the notions of the common good and social justice. For more information, please visit our Philosophy department website (<https://www.canisius.edu/academics/programs/philosophy>).

QUALIFICATIONS

Students must maintain an overall 2.0 GPA in their undergraduate studies and a 2.0 average in their philosophy program to graduate with a degree in Philosophy.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

CO-CURRICULAR ACTIVITIES

The Philosophy faculty encourages majors and minors to participate in the on-going activities of the Department. Students are invited to the regular colloquia at which faculty present their current research. Students are invited to make presentations to try out the results of their research. In addition there are the Philosophy Club and the Philosophy Honors Society, Phi Sigma Tau. All philosophy majors and minors are members of the Undergraduate Philosophy Association. Membership enables philosophy students to participate in department activities, such as reviewing semester course offerings and considering department policies that affect their undergraduate careers.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be

completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

SUPPLEMENTAL STUDY

The Philosophy faculty encourages each philosophy major to supplement his/her course of study by taking advantage of the large number of free electives available. We recommend that students advance their study of classical and modern languages, and to complement their history of philosophy sequence with appropriate history courses. There is a wide arrange of fine liberal arts courses in the various departments of the College of Arts and Sciences. Philosophy requires a breadth of knowledge in many disciplines.

CURRICULAR COMPONENTS OF A PHILOSOPHY MAJOR

Students desiring to major in philosophy might have scholarly interests to pursue graduate study in philosophy or to acquire competence in philosophy for a diversity of reasons including advanced study in other disciplines. To help students satisfy these interests, the Philosophy faculty offers two major programs that maintain intellectual and academic rigor while promoting the mission to educate for others with attention to the principle of *cura personalis*. Each curriculum combines a historical, a topic, and a fields approach to construct a unified program of instruction. Since our mission emphasizes concern with critical examination of values and principles of ethics and justice, each major curriculum requires one course in study and analysis of argumentation and two courses in the study of ethics, one of which is theoretical.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Students must choose one of two tracks. The *Ignatian Scholars Track* prepares scholars specifically for advanced study in philosophy and the *Hypatian Scholars Track* prepares scholars for advanced study in disciplines other than philosophy.

Ignatian Scholars Track Requirements

This curriculum consists of 12 courses (36 credit hours) beyond PHI 101.

PHI 225	Logic	3
PHI 301	Ancient Philosophy	3
PHI 302	Medieval Philosophy	3
Modern Philosophy - Select at least one of the following:		3
PHI 303	Early Modern Philosophy	
or PHI 304	19th Century Philosophy	
Contemporary Philosophy - Select at least one more of the following:		3
PHI 305	Contemporary Continental Philosophy	

or PHI 306 Contemporary Analytic Philosophy	
Theory of Ethics - Select one of the following:	3
PHI 240 Justice	
PHI 241 Ethics: Traditions in Moral Reasoning	
PHI 252 Happiness, Virtue and the Good Life	
PHI 261 Philosophy of Law	
Applied Ethics - Select one of the following:	3
PHI 242 Ethical Issues in Business	
PHI 243 Bio-Medical Ethics	
PHI 244 Environmental Ethics	
PHI 245 Animal Ethics	
PHI 246 Ethics of Technology	
PHI 247 Food and Agricultural Ethics	
PHI 379 Contemporary Women Philosophers	
Philosophy Elective	3
Philosophy Elective	3
Philosophy Elective	3
Philosophy Elective at the 400 level	3
PHI 451 Senior Thesis	3
Total Credits	36

Hypatian Scholars Track Requirements

This curriculum consists of 10 courses (30 credit hours) beyond PHI 101.

PHI 225 Logic	3
PHI 301 Ancient Philosophy	3
PHI 302 Medieval Philosophy	3
Modern Philosophy - Select at least one of the following:	3
PHI 303 Early Modern Philosophy	
or PHI 304 19th Century Philosophy	
Contemporary Philosophy - Select at least one of the following:	3
PHI 305 Contemporary Continental Philosophy	
or PHI 306 Contemporary Analytic Philosophy	
Theory of Ethics - Select one of the following:	3
PHI 240 Justice	
PHI 241 Ethics: Traditions in Moral Reasoning	
PHI 252 Happiness, Virtue and the Good Life	
PHI 261 Philosophy of Law	
Applied Ethics - Select one of the following:	3
PHI 242 Ethical Issues in Business	
PHI 243 Bio-Medical Ethics	
PHI 244 Environmental Ethics	
PHI 245 Animal Ethics	
PHI 246 Ethics of Technology	
PHI 247 Food and Agricultural Ethics	
PHI 379 Contemporary Women Philosophers	
Philosophy Elective	3
Philosophy Elective	3
Philosophy Elective at the 400 level	3
Total Credits	30

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

The following four-year schedule maps out a course of study that a philosophy major may pursue. However, this schedule is provided only to suggest one way among many that a student might design his/her program of undergraduate philosophy study.

Freshman	
Fall	Spring
PHI 101	PHI 225 (Core Field 2)
Sophomore	
Fall	Spring
PHI History Component	PHI History Component
PHI Ethics Theory	PHI Applied Ethics
Junior	
Fall	Spring
PHI History Component	PHI History Component
PHI Elective (Ignatian track only)	PHI 400 Elective
Senior	
Fall	Spring
PHI Elective	PHI Elective
	PHI 451 (Ignatian track only)

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Majors will acquire a broad knowledge of major figures, branches, and terminologies in Western philosophy.

- **Objective A:** Demonstrate knowledge of major figures in Western Philosophy.
- **Objective B:** Demonstrate knowledge of major branches in Western Philosophy.
- **Objective C:** Demonstrate knowledge of terminology particular to a branch or tradition within philosophy.

Student Learning Goal 2

Majors will develop a capacity for communicating philosophical ideas and arguments.

- **Objective A:** Write cogent prose to communicate philosophical ideas effectively.
- **Objective B:** Construct philosophical arguments.

Student Learning Goal 3

Majors will develop a capacity for thinking critically and for effectively assessing arguments.

- **Objective A:** Analyze arguments in philosophical discourse.
- **Objective B:** Identify underlying presuppositions of a philosopher's argumentative discourse.
- **Objective C:** Raise questions and frame philosophical problems introduced by texts.

Student Learning Goal 4

Majors will become information literate as this applies to philosophical study and research.

- **Objective A:** Cite properly and work effectively with both primary and secondary sources.

CURRICULAR COMPONENTS OF A PHILOSOPHY MINOR

Philosophic Associates

A minor in philosophy consists of five (5) courses beyond PHI 101 that might complement another major or provide personal intellectual satisfaction.

PHI 301	Ancient Philosophy	3
or PHI 302	Medieval Philosophy	
Select one of the following:		3
PHI 303	Early Modern Philosophy	
PHI 304	19th Century Philosophy	
PHI 305	Contemporary Continental Philosophy	
PHI 306	Contemporary Analytic Philosophy	
Philosophy Elective		3
Philosophy Elective		3
Philosophy Elective		3
Total Credits		15

PHI 101 Introduction to Philosophy 3 Credits

Core Curriculum Foundation Course. A study of the major eras in the history of philosophy: Ancient, Medieval, Modern, and Contemporary and also of principal branches in philosophy: Aesthetics, Epistemology, Theories of Ethics, Logic, Metaphysics, and Theories of Justice. Students study the Catholic/Jesuit tradition and become able to identify the elements of rational argumentation. PHI 101 is a prerequisite for PHI 200 courses.

PHI 211 Philosophy of Religion 3 Credits

A study of principal contemporary and classical discussions about the existence and nature of God, God's relationship to the world, the individual and society.

Prerequisite: PHI 101.

PHI 225 Logic 3 Credits

An introductory study of logic treating such topics as: deduction, techniques for evaluating reasoning, language and meaning, various formal and informal fallacies, and the notion of implication.

Prerequisite: PHI 101.

Fulfills College Core: Field 2 (Philosophy)

PHI 240 Justice 3 Credits

A study of enduring questions such as: What does it take to be a just person and to create a just society? Includes investigations of (1) theories of justice and (2) problems of justice relating to injustice and oppression due to race, class, species, and gender.

Prerequisite: PHI 101.

Fulfills College Core: Field 2 (Philosophy), Justice

PHI 241 Ethics: Traditions in Moral Reasoning 3 Credits

A survey of principal traditions in moral reasoning with attention to moral principles inclusive of utility, deontology and virtue, and their applications to contemporary social realities.

Prerequisite: PHI 101.

Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 242 Ethical Issues in Business 3 Credits

study of important concerns in business and market realities with special concern to applying moral principles in decision making.

Prerequisite: PHI 101.

Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 243 Bio-Medical Ethics 3 Credits

A study of important moral issues in relation to current concerns in medicine, medical technology, and the life sciences.

Prerequisite: PHI 101.

Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 244 Environmental Ethics 3 Credits

A study of classical and contemporary moral theories concerning the relationship of human beings to the manifold of their natural surroundings.

Prerequisite: PHI 101.

Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 245 Animal Ethics 3 Credits

What do we mean by classifying together all non-human animals as 'animals'? This course critically examines the traditional notion that animals are commodities or resources for human use. It questions whether all sentient beings have intrinsic value and should be respected and what form that 'respect' should take.

Prerequisite: PHI 101.

Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 246 Ethics of Technology 3 Credits

A study of how prominent technologies such as television, cellular phones, and medical breakthroughs affect individual persons and our society, and in what ways technological innovations make us better or worse.

Prerequisite: PHI 101.

Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 247 Food and Agricultural Ethics 3 Credits

A study of the moral implications of the current food system in connection with the production, distribution, and consumption of food and aims to examine what might constitute a reasonable position regarding the ethics of what we eat and what each of us can do to help bring about a more just food system.

Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 252 Happiness, Virtue and the Good Life 3 Credits

A study of the role of virtue and vice in the moral life, how they emerge from developments of personal character and relate to meaningful human happiness, fulfillment, and the good life.

Prerequisite: PHI 101.

Fulfills College Core: Ethics, Field 2 (Philosophy)

PHI 261 Philosophy of Law 3 Credits

A study of the nature, sources and sanctions of law and legal theory, treating concerns of legal positivism, natural law theory, rights and justice, and the relationship between law and morality.

Prerequisite: PHI 101.

Fulfills College Core: Field 2 (Philosophy), Justice

PHI 264 Justice & the Environment: The Problem of Climate Change 3 Credits

An examination of differing views of justice and their impact on environmental action with special focus on the issue of climate change.

Prerequisite: PHI 101.

Fulfills College Core: Field 2 (Philosophy), Justice

<p>PHI 267 Catholic Social Thought 3 Credits A study of the legacy of Catholic social teaching from official papal encyclicals of Leo XIII to the present, from unofficial vehicles of independent social thinkers, and from social forces such as labor unions, journals, political parties, and spiritual social justice movements. Prerequisite: PHI 101. Fulfills College Core: Field 2 (Philosophy), Justice</p>	<p>PHI 301 Ancient Philosophy 3 Credits An examination of principal trends in ancient philosophy in the West from the Preplatonic Greeks through Plato and Aristotle to the beginning of the Medieval period. Prerequisite: PHI 101.</p>
<p>PHI 271 Philosophy of Human Rights 3 Credits A study of various issues of human rights in global perspective to ask if human rights transcend political orders, whether they are universally applicable to all human beings, or determined to be culturally relative. Prerequisite: PHI 101. Fulfills College Core: Field 2 (Philosophy), Justice</p>	<p>PHI 302 Medieval Philosophy 3 Credits An examination of principal trends in Medieval philosophy from St. Augustine in the fifth century to Renaissance philosophical explorations.</p>
<p>PHI 272 Gender and Philosophy 3 Credits An investigation into feminist theories that analyzes the role that gender plays in society and in the formation of the masculine and feminine subjects; an examination of notions of power, structure and work; and gender as performance and representation. Prerequisite: PHI 101. Fulfills College Core: Field 2 (Philosophy), Justice</p>	<p>PHI 303 Early Modern Philosophy 3 Credits An in-depth examination of major thinkers in the modern western philosophical tradition from Descartes to Kant, from the Renaissance to the Enlightenment. Prerequisite: PHI 101.</p>
<p>PHI 273 Race and Philosophy 3 Credits A study of philosophical assumptions underlying concepts of race that treats designations of racial identities, the political effects of racial classification, the ethics of race and the metaphysical legitimacy and social reality of racial designations. Prerequisite: PHI 101. Fulfills College Core: Field 2 (Philosophy), Justice</p>	<p>PHI 304 19th Century Philosophy 3 Credits A study of principal trends of 19th century European philosophy beginning with Kant and leading up to developments in early 20th century thinking.</p>
<p>PHI 274 Social and Political Philosophy 3 Credits A study of foundational philosophical theories on how to organize the collective and social life of individual human beings, examining justifications for state authority, establishing citizen's rights and allocating resources for human well-being. Prerequisite: PHI 101. Fulfills College Core: Field 2 (Philosophy), Justice</p>	<p>PHI 305 Contemporary Continental Philosophy 3 Credits An examination of principle philosophic trends emerging in Europe after the 19th century, treating such traditions as phenomenology, critical theory, existentialism, feminism, post-structuralism, deconstruction, and postmodernism.</p>
<p>PHI 285 Black Philosophy 3 Credits A study of philosophical trends within the black diaspora with attention to the contributions of prominent black philosophers and social activists. Prerequisite: PHI 101. Fulfills College Core: Field 2 (Philosophy)</p>	<p>PHI 306 Contemporary Analytic Philosophy 3 Credits An examination of principal philosophic trends in the Anglo-American world including logical positivism, linguistic analysis, and ordinary language philosophy.</p>
<p>PHI 286 Latin American Philosophy 3 Credits A study of the various philosophical movements in Latin America with a focus on the way of practicing philosophy that is rooted in the lived reality of Latin American peoples. Prerequisite: PHI 101. Fulfills College Core: Field 2 (Philosophy), Justice</p>	<p>PHI 379 Contemporary Women Philosophers 3 Credits A study of the thinking of important women philosophers of the 20th century with special concern to address their responses to the enduring questions of ethics, especially for modern times. Prerequisite: PHI 101.</p>
<p>PHI 291 Philosophy of Art 3 Credits A study of various approaches to thinking philosophically about art and covering the history of aesthetics with special emphasis on contemporary arts including film and music. Prerequisite: PHI 101. Fulfills College Core: Field 2 (Philosophy)</p>	<p>PHI 399 Ethics, Justice, & the Problem of Poverty 3 Credits This is a Core Capstone course; students from all majors are welcome. The first half of the course focuses on ethics, justice, and diversity. The second half of the course is focused on economics and global awareness vis-à-vis the problem of poverty. Prerequisite: PHI 101. Fulfills College Core: Core Capstone</p>
<p>PHI 292 Philosophy of Beauty 3 Credits A study of various approaches to thinking philosophically about beauty and covering the concept in the history of aesthetics with special emphasis on the problems of beauty in contemporary culture. Prerequisite: PHI 101. Fulfills College Core: Field 2 (Philosophy)</p>	<p>PHI 401 Topics in Philosophy 3 Credits A seminar style course offered by faculty in the Department of Philosophy on a rotating basis and focusing on a different topic each time it is offered. Check with the department to find out what will be offered in any given academic year.</p>
	<p>PHI 451 Senior Thesis 3 Credits An Ignatian Scholar successfully completes a senior thesis. This is a culminating experience in which a student expresses mature habits of self-directed study and critical analysis, with an ability to integrate knowledge beyond the expectations of a seminar paper. A senior thesis addresses a select philosophic topic and is especially concerned with philosophic argumentation. An Ignatian Scholar demonstrates ability to exercise appropriate research methods, to provide critical assessment of issues, to assess theoretical presuppositions underlying a discourse and to advance well-constructed argumentation. A senior thesis ought to exhibit the values of the department mission. Prerequisite: PHI 101 & at least two 300-level philosophy courses.</p>

PHI 499 Independent Study**1-3 Credits**

A tutorial style course on a topic approved by the department and agreed upon between the student and a professor. Independent studies require an application and approval by the associate dean.

Prerequisite: PHI 101 & at least two 300-level philosophy courses.

Physics

Chair: Michael Wood, PhD

INTRODUCTION

The Canisius College Physics major provides a strong background in the scientific skills of analysis and experimentation and gives students a broad choice of career opportunities. The Physics major is a preparation for further study in graduate physics and related areas such as oceanography, geophysics, patent law, medicine, engineering and astronomy and entry into research and development employment. The specific goal for majors is a thorough knowledge of basic physical science and the mathematical and experimental application of this basis to the study of natural phenomena. Other offerings are intended to give non-majors an appreciation of the relation between science and the world within which they live.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Physics website (<https://www.canisius.edu/academics/programs/physics>).

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Physics. For admission to the advanced program (Junior/Senior level), a student must have completed, with a grade of at least C, General Physics (PHY 223, PHY 224, PHY 225) and Mathematics through Differential Equations (MAT 222). To qualify for graduation with a degree in Physics, a grade of C- or higher is required in PHY 225, PHY 226, and all 300- and 400-level Physics courses. Students are expected to be prepared to take Calculus 1 (MAT 111) their first semester at Canisius.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Advising is particularly important for Physics majors due to the highly structured curriculum and numerous course prerequisites.

MAJOR EXPERIENCES

Physics majors use modern physics equipment like a high-resolution spectroscopy equipment, lasers, high vacuum apparatus, a multi-channel nuclear spectrometer, various radiation detectors, and an X-ray spectrometer. They have access to departmental computers. In addition, a large supply of other equipment is available for students to use as early as their first semester. In addition to the standard physics major, students may also wish to consider the Dual Degree Engineering Program, which offers students the option of completing a Physics Degree at Canisius

and an Engineering degree at University at Buffalo (UB) or Pennsylvania State University at Erie. For those interested in Physics teaching, a Physics Education program is offered in conjunction with the education department. The Physics Club offers opportunities for social activities, technical tours, lectures and other activities.

The faculty in the department are active in research in the fields of experimental nuclear physics, robotics, physics education, and computational science. Students frequently join with a professor on his or her respective projects and perform a variety of research tasks. Students gain skills in large-scale computation, data analysis, electronics, and detector assembly and testing. In many cases, the research is interdisciplinary with the student working with a physics professor and a faculty member in the Mathematics, Computer Science, and Digital Media Arts Departments. Routinely, students present posters at local, statewide, and national conferences. Past students have conducting research through the National Science Foundation's Research Experience for Undergraduates at institutions such as University of Rochester, University of Notre Dame, and Baylor University.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Dual majors in Physics and Computer Science, or Physics and Mathematics are common and offer interesting career options.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

The Physics minor is particularly popular when combined with majors in Chemistry, Mathematics, or Computer Science.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

PHY 107 & 107L	Computer Programming for Science and Computer Programming for Science Laboratory	4
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	4
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	4
PHY 225 & 225L	General Physics for Physical Science Majors III and General Physics for Physical Science Majors III Laboratory	4
PHY 226 & 226L	Basic Electronics and Basic Electronics Laboratory	4
PHY 330	Electrodynamics I	3
PHY 331	Electrodynamics II	3
PHY 332	Statistical and Thermal Physics	3
PHY 335	Mathematical Analysis for Physicists	4
PHY 350 & PHY 351	Modern Physics Laboratory and Advanced Laboratory	2
PHY 443	Classical Mechanics	3
PHY 445	Special Topics in Physics	1
PHY 446	Quantum Mechanics I	4
PHY 447	Quantum Mechanics II	3
PHY 498	Senior Project	1-3
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
MAT 111 & MAT 112	Calculus I and Calculus II	8
MAT 211	Calculus III	4
MAT 222	Differential Equations	3
Science elective (Science Elective to be chosen from BIO 111, CHM 112, CSC 112, MAT 219 or MAT 351)		3-4
Total Credits		69-72

MAJOR ELECTIVES

Computer Science and Mathematics courses are highly recommended, particularly linear algebra.

ADDITIONAL COURSE CONSIDERATIONS

Courses in the Junior and Senior years rotate on a two year basis. Please consult your advisor about which set of courses is available in any given year.

Note: Course availability may be a factor in determining time to degree completion for transfer students. Discussion with department faculty is highly recommended for transfer students.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall
CHM 111

Spring
Science Elective¹

MAT 111	MAT 112
PHY 107 & 107L	PHY 223
Sophomore	
Fall	Spring
MAT 211	MAT 222
PHY 224	PHY 225
	PHY 226
Junior	
Fall	Spring
PHY 330	PHY 331
PHY 350	PHY 351
PHY 335	
Senior	
Fall	Spring
PHY 446	PHY 447
PHY 332	PHY 498
PHY 443	
PHY 445	

¹ Science Elective to be chosen from BIO 111, CHM 112, CSC 112, MAT 219 or MAT 351. The science elective may be taken in a subsequent semester if it requires a prerequisite. In this case, take a course in the Core Curriculum in the spring semester of the freshman year.

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Physics majors will know how to learn physics.

Students will:

- **Objective A:** Critically assess written expositions of physics, contrasting those ideas which are fundamental from those which are consequential;
- **Objective B:** Identify the circumstances under which a principle applies.

Student Learning Goal 2

Physics majors are critical thinkers that can produce analytical solutions to physical problems.

Students will:

- **Objective A:** Identify a problem and generate equivalent statements of a problem;
- **Objective B:** Delineate the principles of physics and analytical techniques used to obtain a solution to a problem;
- **Objective C:** Apply the principles and techniques of physics to obtain a solution to a problem;
- **Objective D:** Demonstrate the correctness of a solution by showing that it yields expected results in limiting and other special cases.

Student Learning Goal 3

Physics majors possess the technical skills needed to function effectively in a physics laboratory.

Students will:

- **Objective A:** Collect a broad range of data with an ability to adapt to new experimental methods, apparatus and tools;
- **Objective B:** Apply fundamental statistical methods to analyze data;
- **Objective C:** Display data with clarity;
- **Objective D:** Draw sound conclusions from the results of data analysis.

Student Learning Goal 4

Physics majors communicate ideas in physics with precision and clarity.

Students will:

- **Objective A:** Produce precise and clear expository written material about physics;
- **Objective B:** Produce well-organized and clear oral presentations of physics material.

PHYSICS MINOR

The physics minor requires seven courses, which are to be distributed as follows.

Four Required Courses:

PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	4
PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors II Laboratory	4
PHY 225	General Physics for Physical Science Majors III	3
MAT 211	Calculus III	4

Select three courses from the following two groups. At least one of these three must be selected from Group I:

Group I:		
PHY 330	Electrodynamics I ^{1,3}	
PHY 331	Electrodynamics II ¹	
PHY 332	Statistical and Thermal Physics ⁵	
PHY 443	Classical Mechanics ⁴	
PHY 446	Quantum Mechanics I ²	
Group II:		
PHY 226	Basic Electronics	
Two of PHY 350, PHY 351, PHY 445 Advanced Lab		
MAT 222	Differential Equations	
PHY 335	Mathematical Analysis for Physicists	
PHY 447	Quantum Mechanics II	
CHM 301	Classical Physical Chemistry	
Total Credits		15

¹ PHY 331 requires PHY 330 as a prerequisite.

² PHY 446 is required for PHY 447.

³ PHY 335 is highly recommended as a co-requisite for PHY 330.

⁴ PHY 443 requires MAT 222 as a prerequisite.

⁵ If CHM 301 is used for Group II, PHY 332 cannot be used for Group I.

Note: MAT 111 and MAT 112 are prerequisites for one or more of the courses listed above. The Physics minor is particularly popular when combined with majors in Chemistry, Mathematics, or Computer Science.

PHY 107 Computer Programming for Science 3 Credits

Introduction to computer programming with the C/C++ and Matlab-equivalent languages. Examples and applications for science.

Corequisite: PHY 107L.

Offered: every fall.

PHY 107L Computer Programming for Science Laboratory 1 Credit

Required laboratory for computer programming with the the C/C++ and Matlab-equivalent languages. Examples and applications for science.

Corequisite: PHY 107.

Offered: fall.

PHY 129 Introduction to Astronomy 3 Credits

Understanding modern astronomy by using ideas from basic physics. Mathematics minimized. Naming and viewing stars and constellations is included.

Fulfills College Core: Field 6 (Natural Sciences)

Offered: fall.

PHY 131 Earthquakes: Seismology and Society 3 Credits

The science behind earthquakes: causes, locations, frequency and measurement; affects on geography, human structures and society.

Fulfills College Core: Field 6 (Natural Sciences), Global Awareness

Offered: fall.

PHY 133 Dinosaurs 3 Credits

An introduction to dinosaurs and their world through an examination of their anatomy, evolution, phylogeny, behavior, metabolism and the cause of their extinction. Exploration of geological concepts such as uniformitarianism, stratigraphy, sedimentation, fossilization and taphonomy will help to explain how this knowledge was extracted from the rocks.

Fulfills College Core: Field 6 (Natural Sciences)

Offered: spring.

PHY 201 College Physics I 3 Credits

College Physics for biological-science students. Mechanics of rigid bodies, mechanics of fluids, thermal energy and thermodynamics.

Prerequisite: MAT 110 or MAT 111. **Corequisite:** PHY 201L.

Fulfills College Core: Field 6 (Natural Sciences)

PHY 201L College Physics I Laboratory 1 Credit

Laboratory for College Physics I for biological-science students.

Corequisite: PHY 201.

Offered: fall.

PHY 202 College Physics II 3 Credits

College Physics for biological-science students. Electricity and magnetism, geometrical and physical optics.

Prerequisite: minimum grade of C- in PHY 201. **Corequisite:** PHY 202L.

Offered: spring.

PHY 202L College Physics II Laboratory 1 Credit

Laboratory for College Physics II for biological-science students.

Corequisite: PHY 202.

Offered: spring.

PHY 223 General Physics for Physical Science Majors I 3 Credits

Calculus-based general physics. Mechanics of rigid bodies.

Prerequisite: MAT 110 or MAT 111. **Corequisite:** PHY 223L.

Fulfills College Core: Field 6 (Natural Sciences)

Offered: spring.

PHY 223L General Physics for Physical Science Majors I Laboratory 1 Credit

Laboratory for calculus-based general physics I.

Corequisite: PHY 223.

Offered: spring.

PHY 224 General Physics for Physical Science Majors II 3 Credits

Calculus-based general physics. Electricity and magnetism, geometrical and physical optics.

Prerequisite: minimum grade of C- in PHY 223. **Corequisite:** PHY 224L.

Offered: fall.

- PHY 224L General Physics for Physical Science Majors I Laboratory** 1 Credit
Laboratory for calculus-based general physics II.
Corequisite: PHY 224.
Offered: fall.
- PHY 225 General Physics for Physical Science Majors III** 3 Credits
Calculus-based general physics. Mechanics of fluids, mechanical waves, thermodynamics and kinetic theory, geometrical and physical optics, special theory of relativity.
Prerequisite: MAT 211 & minimum grade of C- in PHY 224. **Corequisite:** PHY 225L.
Offered: spring.
- PHY 225L General Physics for Physical Science Majors III Laboratory** 1 Credit
Laboratory for calculus-based general physics III.
Corequisite: PHY 225.
Offered: spring.
- PHY 226 Basic Electronics** 3 Credits
Circuit analysis, power supplies, semiconductor physics, operational amplifiers, digital electronics. Integrated circuit techniques. Includes laboratory work each week.
Prerequisite: minimum grade of C- in PHY 224. **Corequisite:** PHY 226L.
Offered: spring.
- PHY 226L Basic Electronics Laboratory** 1 Credit
Laboratory for basic electronics course.
Corequisite: PHY 226.
- PHY 330 Electrodynamics I** 3 Credits
Static and time-varying classical electric and magnetic fields in free-space and matter. Prior completion of or concurrent registration for PHY 335 is strongly encouraged.
Prerequisite: PHY 224.
Offered: fall of odd-numbered years.
- PHY 331 Electrodynamics II** 3 Credits
Primary topic: electromagnetic waves in free-space and matter, beginning with the Maxwell equations. Additional topics: radiation and special relativity.
Prerequisite: PHY 330.
Offered: spring of even-numbered years.
- PHY 332 Statistical and Thermal Physics** 3 Credits
Develops statistical concepts and methods used to relate macroscopic to microscopic descriptions of many particle systems.
Prerequisite: PHY 225.
Offered: fall of even-numbered years.
- PHY 335 Mathematical Analysis for Physicists** 4 Credits
Theory and applications of infinite series, Fourier series, Green's functions, Fourier integrals, vector calculus, linear algebra, partial differential equations, and complex variable.
Prerequisite: MAT 222 or permission of instructor.
Offered: fall of odd-numbered years.
- PHY 350 Modern Physics Laboratory** 1 Credit
This course covers the basic principles of 20th century modern physics. The topics include blackbody radiation, particle/wave duality, x-ray diffraction, Bohr's model of the atom, quantum tunneling, and the Schrodinger equation.
Prerequisite: PHY 225.
Fulfills College Core: Advanced Writing-Intensive
Offered: fall of even-numbered years.
- PHY 351 Advanced Laboratory** 1 Credit
This course emphasizes advanced experiments and experimental technique. Topics include, but are not restricted to, dosimetry, radiation detection, gamma-ray spectroscopy, Rutherford scattering, atomic spectroscopy, thin-film deposition, and magnetic resonance.
Prerequisite: PHY 225.
Fulfills College Core: Oral Communication
Offered: fall of odd-numbered years.
- PHY 443 Classical Mechanics** 3 Credits
One, two, and three dimensional motion of a particle, non- inertial systems, classical scattering, rigid-body motion. Lagrange and Hamilton equations, calculus of variations, oscillations.
Prerequisite: PHY 224 & MAT 222.
Offered: fall of even-numbered years.
- PHY 445 Special Topics in Physics** 1 Credit
This course will cover model formation and development using archival journal articles in physics. The subject material will rotate by semester among topics such as astrophysics, quantum theory, and thermodynamics. Students will be expected to read and critique journal articles, lead discussions on journal articles, and trace the development of an area of physics through assigned readings.
Prerequisite: permission of instructor. **Restriction:** must be physics major or minor with senior standing.
Offered: spring of even-numbered years.
- PHY 446 Quantum Mechanics I** 4 Credits
Experimental basis of quantum mechanics, state functions, operators. Review of linear algebra techniques and introduction of the Dirac notation.
Corequisite: PHY 225 & MAT 222.
Offered: fall of even-numbered years.
- PHY 447 Quantum Mechanics II** 3 Credits
Application of Schrodinger's equation, Hamiltonian mechanics, angular momentum, intrinsic spin, parity, and time-dependent quantum mechanics. PHY 446 is highly recommended.
Offered: spring of odd-numbered years.
- PHY 449 Nuclear Physics Lab** 1 Credit
Introduction to experimental nuclear physics. Experiments study nuclear instrumentation, characteristics of radiation and nuclear spectra.
Prerequisite: PHY 446.
Fulfills College Core: Advanced Writing-Intensive
Offered: occasionally.
- PHY 498 Senior Project** 1-3 Credits
A one-semester research project done under the supervision of a faculty member.
Prerequisite: permission of department chair. **Restriction:** senior standing in physics.
Offered: spring.
- PHY 499 Independent Study** 1-3 Credits
An independent study with a faculty member of the Physics Department. Independent studies require an application and approval by the associate dean.
Prerequisite: permission of the instructor, department chair, & associate dean. **Restriction:** permission of the chair.
Offered: fall & spring.

Pre-engineering Programs

Director: Michael Wood, PhD

INTRODUCTION

The 2+2 Pre-Engineering program covers the first two years of a four-year engineering major and is staffed by faculty from the Physics Department. After two years at Canisius students transfer to an Engineering School of their choice to complete the engineering degree. The 2+2 program covers the science, mathematics and computer programming that form the basis of study for the first two years of most engineering school curricula. The 3+2 dual degree program allows students to complete a physics major from Canisius, providing an extensive grounding in both science and engineering that can open the doors to advanced engineering and technology studies in a wide range of fields. The 2+2 program is perhaps better suited to students closely focused on a specific engineering field or career path. The 3+2 program is particularly suited to students who are strongly interested in demanding scientific or industrial research and development careers, particularly in an interdisciplinary area. The dual degree program includes an articulation agreement for students interested in pursuing Mechanical Engineering at the Pennsylvania State University at Erie, The Behrend College. Many students also pursue their engineering degree at University at Buffalo (UB), and Canisius maintains close contact with UB. For a more detailed description of the program and faculty, visit the Physics website (<https://www.canisius.edu/academics/programs/physics>).

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Students interested in advanced scientific or engineering study may be best served by the dual degree Engineering and Physics program, while students clearly focused on a specific engineering discipline are encouraged to pursue the 2+2 program. It is possible to switch between the two programs easily in the first year of study. Some students choose to remain at Canisius after completing the program to pursue other majors such as physics, mathematics, chemistry or computer science, and the transfer into these other majors is simple and straightforward.

QUALIFICATIONS

Transfer and completion of the engineering degree at the second institution requires an admissions process at the second institution and satisfaction of the degree requirements, including core and/ or general education requirements, of that institution. Entering students should be prepared to take Calculus 1 (MAT 111) their first semester.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their

entire academic program and planning their co-curricular or supplemental academic experiences.

Careful consultation with an advisor is particularly important due to the tremendous number of pre-requisites in most engineering courses and the varied requirements of different engineering majors.

FREE ELECTIVES

Students should consult with an advisor in Physics or Engineering to discuss their elective course choices to ensure timely completion of both degrees. Careful advising is a must in this program. Linear Algebra (MAT 219), Organic Chemistry (CHM 227- CHM 228) or additional computer science courses (CSC 111, CSC 112, CSC 213) may be valuable electives.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

CURRICULAR REQUIREMENTS FOR THE MAJOR CORE CURRICULUM

Students in the 3+2 dual degree program complete the general education requirements as part of their overall Canisius education. These requirements can be found in the Core Curriculum (p. 31) or All-College Honors Curriculum (p. 42) sections of the catalog.

Note: Students in this program (The Pre-Engineering 2+2 program) do not complete a degree at Canisius, but transfer to an engineering institution. Instead of completing the Core Curriculum at Canisius, students complete the general studies requirements at the engineering institution.

- 2+2 Program (p. 207)
- 3+2 Program (p. 208)

EGR 111 Introduction to Engineering Design

3 Credits

This first course is an introduction to the field of engineering. Students are introduced to engineering analysis and design through projects in robotics. The students will gain an overview of the various engineering fields and will be instructed in professional ethics and etiquette.

Offered: fall.

EGR 207 Engineering Statics

3 Credits

Students study forces and torques on rigid bodies, couples, moments, centroids and moments of inertia. They consider equilibrium conditions, friction, free body diagrams, applications to beams, trusses, frames, and other structures.

Prerequisite: PHY 223 & MAT 112.

Offered: fall.

EGR 208 Engineering Dynamics 3 Credits
 Students learn about the kinematics of particles and rigid objects. Topics include D'Alembert's Principle, moving reference frames, work-energy methods, impulse, and momentum vibration with applications to engineering problems.
Prerequisite: EGR 207.
Offered: spring.

EGR 211 Engineering Thermodynamics 3 Credits
 Students learn the fundamental concepts and laws of thermodynamics, equilibrium with applications to physical and chemical systems.
Prerequisite: PHY 223.
Offered: fall.

EGR 214 Strength of Materials 3 Credits
 Students investigate the behavior of materials under mechanical loading. The topics include stress and strain relationships, shear, bending moments, torsion, deflection, beams, columns, energy methods, and failure criteria.
Prerequisite: EGR 207.
Offered: spring.

2+2 Program INTRODUCTION

Students complete the first two years of an engineering program in Canisius' Liberal Arts environment, taking advantage of small class sizes and individual attention before transferring to a larger institution to complete their studies. Coursework at Canisius is just as rigorous and demanding as at Engineering institutions, so students typically report little difficulty adapting to the transfer. Early consultation with an advisor is required to map out a curriculum, as the choice of desired engineering major will alter the course schedule somewhat. Mathematical preparation is key to timely completion of this program, again requiring close attention to course scheduling. Outside the classroom, our students work with modern fabrication techniques with our 3-D printer and Computer Numerical Control router. The students can build standard parts or prototype new pieces.

DUAL MAJORS

Dual majors in the Engineering 2+2 program would be subject to the regulations of the engineering institution.

MAJOR COURSES

This varies depending on the engineering major chosen, but typically includes:

MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 222	Differential Equations	3
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L or PHY 225	General Chemistry II and General Chemistry II Laboratory General Physics for Physical Science Majors III	4
PHY 107 & 107L	Computer Programming for Science and Computer Programming for Science Laboratory	4
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	4

PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	4
PHY 225 & 225L or CHM 112	General Physics for Physical Science Majors III and General Physics for Physical Science Majors III Laboratory General Chemistry II	4
PHY 226 & 226L	Basic Electronics and Basic Electronics Laboratory	4
EGR 111	Introduction to Engineering Design	3
EGR 207	Engineering Statics	3
EGR 208	Engineering Dynamics	3
EGR 214	Strength of Materials	3
EGR 211	Engineering Thermodynamics	3
Total Credits		58

MAJOR ELECTIVES

Linear Algebra (MAT 219), additional computer science (CSC 111) and/or Organic Chemistry (CHM 227, CHM 228), depending on choice of engineering major.

RECOMMENDED SCHEDULE: 2+2 PROGRAM

Freshman

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L (or Elective if PHY 225 and lab will be taken)
EGR 111	MAT 112
PHY 107 & 107L	PHY 223 & 223L
MAT 111	

Sophomore

Fall	Spring
MAT 211	MAT 222
PHY 224 & 224L	PHY 225 & 225L (or Elective if CHM 112 and lab was taken)
EGR 211	PHY 226 & 226L
EGR 207	EGR 208 EGR 214

Junior

Fall	Spring
Completed at an Engineering Institution	Completed at an Engineering Institution
Senior	Spring
Completed at an Engineering Institution	Completed at an Engineering Institution

ADDITIONAL COURSE CONSIDERATIONS

Additional courses in some engineering majors may require cross-registration at University at Buffalo (UB).

3+2 Program

INTRODUCTION

The dual degree 3+2 program is a dual degree program, with a BS in Physics from Canisius and a BS in Engineering from an Engineering school. The student will complete all of the requirements for the BS degree in Physics, which includes the foundation, fields, attributes, and capstone courses in the college's core curriculum. While at the college, the student can use modern physics equipment like a high-resolution spectroscopy equipment, lasers, high vacuum apparatus, a multi-channel nuclear spectrometer, various radiation detectors, and an X-ray spectrometer. The student is also encouraged to perform research with a professor or with an internship with a local company or manufacturer. It is in the student's best interest to gain as much professional experience as possible.

DUAL MAJORS

The dual degree 3+2 program is a dual degree program, with a BS in Physics from Canisius and a BS in Engineering from an Engineering school. An additional major at Canisius in this program would prove difficult to complete, due to the already demanding nature of this program; however, students are urged to discuss this with an academic advisor.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

PHY 107 & 107L	Computer Programming for Science and Computer Programming for Science Laboratory	4
PHY 223 & 223L	General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory	4

PHY 224 & 224L	General Physics for Physical Science Majors II and General Physics for Physical Science Majors I Laboratory	4
PHY 225 & 225L	General Physics for Physical Science Majors III and General Physics for Physical Science Majors III Laboratory	4
PHY 226 & 226L	Basic Electronics and Basic Electronics Laboratory	4
PHY 330	Electrodynamics I	3
PHY 331	Electrodynamics II	3
PHY 332	Statistical and Thermal Physics	3
PHY 335	Mathematical Analysis for Physicists	4
PHY 350 & PHY 351	Modern Physics Laboratory and Advanced Laboratory	2
PHY 443	Classical Mechanics	3
PHY 446	Quantum Mechanics I	4
PHY 447	Quantum Mechanics II	3
PHY 445	Special Topics in Physics	1
PHY 498	Senior Project	1-3
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
MAT 111 & MAT 112	Calculus I and Calculus II	8
MAT 211	Calculus III	4
MAT 222	Differential Equations	3
Total Credits		66-68

ALSO, DEPENDING ON ENGINEERING MAJOR

EGR 111	Introduction to Engineering Design	3
EGR 207	Engineering Statics	3
EGR 208	Engineering Dynamics	3
EGR 211	Engineering Thermodynamics	3
EGR 214	Strength of Materials	3

In some cases, cross registration for additional courses at University at Buffalo may be advisable.

MAJOR ELECTIVES

Linear Algebra (MAT 219) is advisable, and required by some engineering programs.

ADDITIONAL COURSE CONSIDERATIONS

Junior/Senior level courses are offered on a rotating two year basis. Students will take either the course listed Junior or Senior year, depending on availability. Students will complete the missing requirements in the Physics Major while at the partnering Engineering school. Prior to completion of the third year at Canisius, students will meet with their advisor to plan out the courses to be completed in the Physics major. Course selection may vary somewhat depending on engineering major and partner institution.

RECOMMENDED SCHEDULE: 3+2 PROGRAM

Freshman

Fall	Spring
CHM 111 & 111L	CHM 112 & 112L (or Elective if PHY 225 with lab will be taken)
MAT 111	MAT 112
PHY 107 & 107L	PHY 223 & 223L
EGR 111	

Sophomore

Fall	Spring
MAT 211	MAT 222
PHY 224 & 224L	PHY 225 & 225L (or Elective if CHM 112 with lab was taken)
EGR 207	PHY 226 & 226L
	EGR 208

Junior

Fall	Spring
EGR 211	EGR 214
Fall Physics courses in Physics Curriculum	Spring Physics courses in Physics Curriculum

Political Science

Chair: John D. Occhipinti, PhD

This major provides students with a comprehensive understanding of Political Science, including American Government, International Relations, Comparative Politics, and Political Philosophy. Political Science supplies students with an ideal academic background for careers in public administration, politics, the law, national security, business, education or academia. The Political Science major also gives students a strong foundation for teaching social studies and can be combined with a major in secondary education. In addition, the Political Science major provides a good basis for graduate study in public policy, international relations, business administration and journalism. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Political Science website (<https://www.canisius.edu/academics/programs/political-science>).

Students are encouraged to participate in the following experiences that are available through the Political Science Department:

- Mentoring for careers, graduate programs and law school;
- Visits to Congress and the Supreme Court;
- Travel to Europe for EuroSim: international student simulation of the European Union;
- Internships in Buffalo, Albany and Washington, D.C.;
- Experiential learning: simulations of the National Security Council (PSC 346), Political Campaigns (PSC 236) and the European Union (PSC 355);
- Opportunities for students to present their research papers at conferences;

- Several student clubs connected with American politics, world politics and the law;
- Membership in Pi Sigma Alpha, the National Political Science Honor Society;
- Departmental Honors Program;
- Funding for travel and internships from the Fitzpatrick Institute.

Each year, the department honors its best graduating seniors with two awards:

- The Pi Sigma Alpha Award is given to the student who best exemplifies academic excellence and the pursuit of knowledge in Political Science.
- The Woodrow Wilson Award is awarded to the Political Science major who combines academic excellence with a demonstrated commitment to public service.

QUALIFICATIONS

To complete the Political Science major, student must earn a minimum grade of C in each of the following courses: PSC 103, PSC 104, PSC 111, PSC 140, PSC 150 and PSC 217. Students must also pass PSC 401. In addition, students must maintain a 2.0 overall average to graduate with a degree in Political Science.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

RÉSUMÉ BUILDING

The Political Science Department assists students in finding internships that allow them to gain valuable professional experience and contacts. Positions are available in Washington and Albany, as well as in Western New York with political campaigns, local government, the U.S. House of Representatives and Senate, and the New York State Assembly and Senate.

The major's required senior capstone course, PSC 401, focuses on professional development and career paths related to the major and is offered with cooperation of career planning experts in the Griff Center.

The college's many study abroad programs offer exciting opportunities to examine politics in other countries or pursue internships, such as with a Member of Parliament in the British House of Commons. Students may also take a limited number of their major electives while studying abroad.

Students may also participate in EuroSim, an international intercollegiate simulation of the European Union, attended by American and European delegations. In even-numbered years students engage in subsidized travel to Europe related to the simulation, and in odd-numbered years the event is held in the United States.

Opportunity for independent study under the guidance of a faculty member is available for juniors and seniors who wish to explore topics that go beyond the department's normal course offerings.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Most of the best majors in Political Science decide to build their resumes and enhance their post-graduate opportunities by earning dual or triple degrees with other programs. The most popular combinations are with Criminal Justice, European Studies, International Relations and Urban Studies. Other common dual degrees combine Political Science with Communication Studies, Economics, English, History, Modern Language and Sociology.

POLITICAL SCIENCE AND LAW

The Political Science major is the most common academic major for prospective law students. The college offers a recommended curriculum for pre-law studies, which can be easily combined with the Political Science major. The Political Science Department is the home for the college's Raichle Pre-Law Center, which offers students mentoring, scholarship and internships. For further information, students should consult with the chair of the Political Science Department and the director of Pre-Law Center.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

For Political Science majors considering a career in business and/or a master of business administration (MBA) degree, preparation can be obtained by pursuing a minor in Business Management (18 credits). Many Political Science students will also benefit by taking macroeconomics and microeconomics (ECO 101 and ECO 102) as free electives.

DEPARTMENT HONORS PROGRAM

The Political Science Honors Program provides an opportunity for outstanding students in the major to go beyond the usual course offerings. Majors who take part in the program will engage in original research under the close supervision of a faculty member. The research project provides the opportunity for students to do independent study on a topic of their own choosing. Participants in the All-College Honors Program may use their senior thesis to fulfill this requirement, provided that this project is prepared under the direction of a member of the Political Science Department.

Taking part in the Honors program can also make students more competitive after graduation, whether for further schooling or employment. For example, students applying for graduate school or law school in their senior year can refer to the research paper in their application. At the same time, participation on the Departmental Honors Program will enable

students' faculty advisors to write more detailed and enthusiastic letters of recommendation for these applications.

Requirements

- Students may apply in the spring of their junior year or in their senior year
- Grade point average overall (to apply for the program and upon graduation): 3.30
- Grade point average for major courses (to apply for the program and upon graduation): 3.50
- Honors Research: a lengthy paper involving original research in the field of Political Science under the direction of a member of the Political Science Department

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

(12 courses)

Required Courses

PSC 103	The American Constitution	3
PSC 104	American Political Process	3
PSC 111	Western Political Tradition	3
PSC 140	International Relations	3
PSC 150	Comparative Government and Politics	3
PSC 217	Research Methods	3
PSC 401	Political Science Capstone (see course listings for details)	1

Total Credits 19

Major Electives (five courses)

Five Political Science courses, including at least two at the 300/400 level. With prior approval, up to two major electives (below the 300 level) may be taken in approved study abroad programs. With prior approval, PSC 499 and All-College Honors thesis directed by faculty members in the Political Science Department may be counted as major electives. Student are encouraged to pursue internships and earn credit for these via PSC 498, but these are pass-fail credits and may not be counted as major electives.

ADDITIONAL COURSE CONSIDERATIONS

Aside from the provisions noted above for courses taken abroad, all required and elective courses in the major and minors must be taken at Canisius College. In general, PSC 103, PSC 104, PSC 140, and PSC 150 may be taken in any sequence. It is strongly recommended that these four courses, along with PSC 111 and PSC 217, be completed before the beginning of the junior year.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman	
Fall	Spring
PSC 103	PSC 104
PSC 150	PSC 140
Sophomore	
Fall	Spring
PSC 111	PSC 217
PSC Major Elective	PSC Major Elective (300/400 level)
Junior	
Fall	Spring
PSC Major Elective (300/400 level)	PSC Major Elective
Senior	
Fall	Spring
PSC 401	PSC Major Elective

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

All successful Political Science majors will develop knowledge of the fields of Political Science and will be able to use and apply that knowledge.

Students will:

- **Objective A:** Demonstrate competency with the conceptual frameworks of Political Science generally;
- **Objective B:** Demonstrate competency with conceptual frameworks of American Politics and Government;
- **Objective C:** Demonstrate competency with conceptual frameworks of Comparative Politics and Government;
- **Objective D:** Demonstrate competency with conceptual frameworks of International Relations;
- **Objective E:** Demonstrate competency with conceptual frameworks of Political Philosophy;
- **Objective F:** Demonstrate competency with issues regarding social science hypothesis-testing;
- **Objective G:** Sustain an argument using the vocabulary and ideas of public and world affairs.

Student Learning Goal 2

All successful Political Science majors will be able to think critically, conduct research and communicate effectively.

Students will:

- **Objective A:** Demonstrate the ability to think critically;
- **Objective B:** Demonstrate the ability to conduct research;
- **Objective C:** Demonstrate competency with issues comprising information literacy;
- **Objective D:** Demonstrate the ability to communicate effectively in writing;
- **Objective E:** Demonstrate the ability to communicate effectively orally.

Student Learning Goal 3

All successful Political Science majors will be able to articulate issues associated with leadership in public affairs as well as articulate issues associated with ethics in public affairs.

Students will:

- **Objective A:** Demonstrate an understanding of leadership qualities;
- **Objective B:** Assess the ethical issues associated with decisions in public affairs.
- Political Science Minor (p. 213)
- Law and Public Policy Minor (p. 213)

PSC 103 The American Constitution 3 Credits

Provides a thorough grounding in the U.S. Constitution, which is America's founding document, and serves as the basis for its governmental system.

Fulfills College Core: Field 5 (Social Sciences)

Offered: fall & spring.

PSC 104 American Political Process 3 Credits

An introduction to American politics including political socialization, public opinion and ideologies, political participation in electoral systems and mass movements, political parties and interest groups.

Fulfills College Core: Field 5 (Social Sciences)

Offered: fall & spring.

PSC 111 Western Political Tradition 3 Credits

Development of Western political tradition from Machiavelli to present, emphasizing development of liberal, conservative and socialist traditions.

Fulfills College Core: Field 4 (History), Justice

Offered: fall & spring.

PSC 140 International Relations 3 Credits

Introduces basic concepts and paradigms of world politics. International security, political economy, and globalization. Power politics, international organizations, transnational politics, and human rights.

Fulfills College Core: Field 5 (Social Sciences), Global Awareness

Offered: fall & spring.

PSC 150 Comparative Government and Politics 3 Credits

Comparative analysis of foreign countries. Governments, ideologies, parties, elections, political culture, civil society and democracy in industrialized and developing countries.

Fulfills College Core: Field 5 (Social Sciences), Global Awareness

Offered: fall & spring.

PSC 215 National Issues and Public Policy 3 Credits

Selected policy issues and their relationship to the political process including health care, homeland security, welfare and housing.

Offered: fall of even numbered years.

PSC 217 Research Methods 3 Credits

Basic, non-statistical treatment of current techniques and methodologies which characterize political science research.

Offered: every spring.

PSC 224 Congress and the Legislative Process 3 Credits

Survey of Congressional procedures and practices. Emphasis on recent changes within Congress, and the position of Congress in the U.S. political and governmental system.

Fulfills College Core: Field 5 (Social Sciences), Oral Communication

Offered: fall of even-numbered years.

- PSC 225 U.S. Presidency** 3 Credits
Survey of the U.S. executive branch of government, including President, Vice President, White House staff, Executive office and the bureaucracy.
Offered: fall of odd-numbered years.
- PSC 233 Interest Groups and Public Opinion in America** 3 Credits
Development of the notions of opinion and interest, their transmission and their influence on decision-making.
Offered: spring of odd-numbered years.
- PSC 236 Political Campaigning** 3 Credits
Campaigning resources, techniques, strategies and goals. Practical and theoretical treatment. Field research.
Offered: fall of odd-numbered years.
- PSC 237 State and Local Politics** 3 Credits
The institutions and policies of state and local governments, with focus on New York State. State and local elections, gubernatorial politics, state legislatures, community politics.
Offered: fall of odd-numbered years.
- PSC 241 Human Rights and Globalization** 3 Credits
History and evolution of international human rights laws. Explores human rights violations, challenges for enforcing human rights and prosecuting abuses. Analysis of human rights conditions in different world regions.
Fulfills College Core: Field 5 (Social Sciences), Global Awareness
Offered: every fall.
- PSC 242 International Organizations** 3 Credits
International and transnational. Intergovernmental and non-governmental. Regional and global. Content areas: political, economic and humanitarian.
Fulfills College Core: Advanced Writing-Intensive, Field 5 (Social Sciences), Global Awareness
Offered: fall of odd-numbered years.
- PSC 244 War: Causes and Consequences** 3 Credits
Investigates the conditions, processes, and events that lead to the outbreak of war, and explores the political, strategic, and human consequences of wars. In-depth analysis of selected wars in history and in contemporary global politics.
Offered: spring of odd-numbered years.
- PSC 245 American Foreign Policy** 3 Credits
US foreign relations in political perspective, including diplomatic history since 1945, as well as government structure, decision-making processes, and controversial foreign policy issues.
Offered: every fall.
- PSC 249 Protest, Politics, & the State** 3 Credits
Examines contentious politics in global perspective, with a focus on nonviolent protest and social movements. Foreign, domestic, and transnational protests and their relationship with the state (U.S. and many others).
Offered: spring of even-numbered years.
- PSC 250 Politics in Latin America** 3 Credits
History of Latin America. Introduces the region's political, economic, and social characteristics. In-depth analysis of issues and countries in the region.
Offered: every spring.
- PSC 320 American Constitutional Law I** 3 Credits
Development of constitutional law in the U.S. from the founding to present. Use of case-study method with focus on judicial review, the separation of powers and federalism. The growth of executive authority and the emergence of the administrative state.
Fulfills College Core: Field 5 (Social Sciences), Justice
Offered: every fall.
- PSC 321 American Constitutional Law II** 3 Credits
The historical origin and development of the Bill of Rights. Close examination of Supreme Court decisions interpreting and expanding rights. Freedom of speech and religion, due process and equal protection. Current controversies over the right to privacy, affirmative action and gender equality.
Fulfills College Core: Field 5 (Social Sciences), Justice
Offered: spring of even-numbered years.
- PSC 325 Elections and Voting Behavior** 3 Credits
The various types of elections and electoral procedures and their relationship to voter turnout and voter choice.
Offered: spring of even-numbered years.
- PSC 334 Public Administration** 3 Credits
The Federal Bureaucracy: its relationship to the executive and the public. Elements and issues of public-sector management.
Prerequisite: PSC 103 or PSC 104 or permission of instructor.
Offered: every spring.
- PSC 335 Political Parties** 3 Credits
Development and present conditions of political parties. What they do and why they do it. Parties' past and present roles, as well as their future prospects.
Offered: occasionally, currently scheduled for spring 2018.
- PSC 336 Urban Government and Politics** 3 Credits
Structure, function, operation and politics of local government. Machine and reform models, power and participation. Significant policy issues to be addressed include schools, finances, land use, planning and crime.
Fulfills College Core: Field 5 (Social Sciences)
Offered: fall of even-numbered years.
- PSC 345 Transnational Crime After 9/11** 3 Credits
Cross-border organized crime and responses, especially in North America and Europe. Emphasis on drug trafficking, terrorism and irregular immigration. Crime-fighting, counter-terrorism, border management and international police cooperation. Guest speakers and video.
Fulfills College Core: Field 5 (Social Sciences), Global Awareness
Offered: spring of even-numbered years.
- PSC 346 National Security Council** 3 Credits
Role-play simulation of the National Security Council. Student "policymakers" conduct briefings, develop initiatives and debate policy positions and proposals concerning U.S. national security. Emphasizes strategic, ethical and moral dilemmas in foreign policy decision-making.
Prerequisite: PSC 140 and PSC 245. Juniors and Seniors only. Students must also complete a brief survey by May 1 or they will be dropped from the course.
- PSC 355 European Union** 3 Credits
History of European integration. Structure, process and politics of EU policies. Optional co-curricular international, intercollegiate simulation of the EU and travel (EuroSim).
Fulfills College Core: Field 5 (Social Sciences), Global Awareness, Oral Communication
Offered: fall of odd-numbered years.
- PSC 360 Political Economy of the Developing World** 3 Credits
Reviews the main theories on development. Explores the relationship between international and domestic factor in fostering development.
Offered: every spring.

PSC 370 Domestic Conflicts & Peace 3 Credits

Examines the factors that account for domestic conflicts. Explores the different mechanisms for their resolution and the challenges faced by post-conflict societies.

Fulfills College Core: Advanced Writing-Intensive, Field 5 (Social Sciences)

Offered: fall of even numbered years.

PSC 401 Political Science Capstone 1 Credit

Focuses on professional development and career planning related to the major, including law, government, politics, lobbying, security, international affairs, teaching, and business. Classroom sessions and online assignments to prepare students for post-graduate success. Offered with cooperation of career planning experts in the GriffCenter.

Offered: spring 2017 and every fall thereafter.

PSC 420 The Constitution, The War on Terror and Civil Liberties 3 Credits

Civil liberties issues in the war on terrorism. Treatment and rights of detainees, enhanced interrogation, ethnic and racial profiling, use of the war power including drone strikes, data collection, Foreign Intelligence Surveillance Act; U.S. citizens as enemy combatants. Military detention and trial of terrorist suspects.

Offered: spring of odd-numbered years.

PSC 436 Seminar in Presidential Campaigning and Advance Work 3 Credits

Political advance work in the context of contemporary American presidential campaigns.

Prerequisite: permission of instructor.

Offered: occasionally, currently scheduled for fall of 2019.

PSC 442 Seminar in International Relations 3 Credits

Theoretically informed perspectives on global affairs explored through selected topics and issues unified by a central theme, such as leaders and leadership in international politics.

Prerequisite: senior International Relations major, or permission of instructor. **Restriction:** must be an International Relations major or obtain permission of instructor.

Fulfills College Core: Core Capstone

Offered: every spring.

PSC 452 Politics of Identity in Europe 3 Credits

Nationalism, separatism and European identities. Immigrant communities and responses by Europe's governments and political parties. Islam in Europe and challenges for identity and security. Lessons for U.S. public policy.

Restriction: seniors only.

Fulfills College Core: Core Capstone

Offered: spring of odd-numbered years.

PSC 498 Internship 1-12 Credits

A variety of opportunities are available locally, as well as in Washington, DC and Albany. Internships arranged by faculty members in government, law offices and non-profit organizations. Prior to seeking approval, a student must work with a faculty member to develop a syllabus of learning goals, written outputs and deadlines. Pass-Fail. Does not apply as a major elective.

Prerequisite: permission of chair of the political science department & associate dean.

Offered: fall & spring.

PSC 499 Independent Study 1-3 Credits

Research and/or directed reading under direction of faculty members associated with the Political Science department. Prior to seeking approval, a student must work with a faculty member and his/her on-site supervisor to develop a syllabus of learning goals, written outputs and deadlines. Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

Offered: fall & spring.

Law and Public Policy Minor

The Law and Public Policy minor, for both majors and non-majors, focuses on the relationship between the legal system and public policy (8 courses – 24 credits)

ECO 101	Principles of Macroeconomics	3
ECO 311	Metropolitan Economic Development and GIS	3
PSC 103	The American Constitution	3
PSC 215	National Issues and Public Policy	3
PSC 245	American Foreign Policy	3
PSC 345	Transnational Crime After 9/11	3
PSC 320	American Constitutional Law I	3
PSC 321	American Constitutional Law II	3
or PSC 420	The Constitution, The War on Terror and Civil Liberties	
Total Credits		24

Note: Substitutions for ECO 311 are at the discretion of the Department Chair and need to be approved in advance.

Political Science Minor

The Political Science minor, for non-majors only, provides an introduction to an overview of the discipline:

PSC 103	The American Constitution	3
PSC 104	American Political Process	3
PSC 111	Western Political Tradition	3
PSC 140	International Relations	3
PSC 150	Comparative Government and Politics	3
Public Policy - Select one of the following:		3
PSC 215	National Issues and Public Policy	
PSC 237	State and Local Politics	
PSC 245	American Foreign Policy	
PSC 334	Public Administration	
PSC 345	Transnational Crime After 9/11	
PSC 360	Political Economy of the Developing World	
American Political Institutions and Behavior - Select one of the following:		3
PSC 224	Congress and the Legislative Process	
PSC 225	U.S. Presidency	
PSC 325	Elections and Voting Behavior	
PSC 335	Political Parties	
Total Credits		21

Psychology

Chair: Susan K. Putnam, PhD

INTRODUCTION

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Psychology website (<https://www.canisius.edu/academics/programs/psychology>).

QUALIFICATIONS

Students must maintain a 2.0 GPA in the major and a 2.0 overall average to graduate with a degree in Psychology.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Required Courses

PSY 101	Introduction to Psychology I	3
PSY 102	Introduction to Psychology II	3
PSY 201	Basic Statistics for Behavioral Sciences	3
PSY 202	Research Methods in Psychology	3
Core I: Neuroscience & Cognition		
Select one of the following:		3
PSY 324	Cognitive Psychology	
PSY 326	Psychology of Memory	
PSY 391	Biopsychology of Stress	
PSY 397	Neurobiology of Mental Disorders	
PSY 398	Neurobiology of Childhood Mental Disorders	
PSY 410	Fundamentals of Human Neuropsychology	
PSY 431	Sensation and Perception	
Core II: Developmental & Psychosocial		
Select one of the following:		3
PSY 203	Lifespan Developmental Psychology	
PSY 302	Personality Psychology	
PSY 303	Abnormal Psychology	
PSY 318	Social Psychology	
PSY 323	Motivation and Emotion	
PSY 384	Child & Adolescent Psychopathology	
Core III: Outcomes & Applications		
Select one of the following:		3
PSY 229	Industrial/Organizational Psychology	
PSY 329	Leadership and Motivation	
PSY 334	Child, Family and Community Psychology	
PSY 373	Behavior Modification	
PSY 395	Assessment in the Behavioral Sciences	
PSY 452	Techniques of Counseling	
PSY 453	Theories of Counseling	
Total Credits		21

MAJOR ELECTIVES

Psychology Electives: any three psychology courses listed in the catalog or substitutions approved by the department chairperson

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE

Freshman	
Fall	Spring
PSY 101	PSY 102
Sophomore	
Fall	Spring
PSY 201	PSY 202
Psychology core	Psychology core
Junior	
Fall	Spring
Psychology core	Psychology elective

Senior
Fall
Psychology elective

Spring
Psychology elective

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Students will demonstrate knowledge in selected discipline-specific content areas of psychology.

Students will:

- **Objective A:** demonstrate knowledge in learning theory, cognition, and memory;
- **Objective B:** demonstrate knowledge of sensation and perception, and physiological psychology;.
- **Objective C:** demonstrate knowledge in the areas of clinical and abnormal psychology as well as personality theory;
- **Objective D:** demonstrate knowledge of social and developmental psychology.

Student Learning Goal 2

Students will demonstrate abilities related to scientific inquiry in psychology.

Students will:

- **Objective A:** demonstrate knowledge of basic research methods;
- **Objective B:** use basic statistics to test hypotheses and correctly interpret the results of their analyses;
- **Objective C:** think critically about psychological phenomena and research;
- **Objective D:** demonstrate the communication skills, information literacy, and technology literacy necessary for conducting and interpreting scientific psychological research.

Student Learning Goal 3

Students will demonstrate knowledge of psychological ethics and social responsibility.

Students will:

- **Objective A:** demonstrate knowledge of the APA code of Ethics in the treatment of human and nonhuman research participants;
- **Objective B:** demonstrate knowledge of ethical guidelines within the context of academic and professional psychology.

The Psychology Department offers several psychology minors:

Child, Family and Community Studies (p. 228)

Industrial/Organizational Psychology Minor (p. 218)

Neuropsychology Minor (p. 218)

Psychology Minor (p. 217)

School Psychology (p. 218)

Sports Psychology (p. 218)

PSY 101 Introduction to Psychology I 3 Credits

The study of behavior from a psychological perspective. Topics include methods of psychological inquiry, motivation and emotion, thinking and language, learning, memory and physiological basis of behavior. Students taking PSY 101 are expected to be available for participation in research studies or equivalent activity.

Offered: every fall.

PSY 102 Introduction to Psychology II 3 Credits

The study of behavior from a psychological perspective. Topics include methods of psychological inquiry, human development, social behavior, psychological testing, personality, psychopathology and psychotherapy. May be taken before PSY 101. Students taking PSY 102 are expected to be available for participation in research studies or equivalent activity.

Offered: spring.

PSY 201 Basic Statistics for Behavioral Sciences 3 Credits

Descriptive statistics, probability, sampling distributions, hypothesis testing and inferential statistics. SPSS for Windows.

Offered: fall & spring.

PSY 202 Research Methods in Psychology 3 Credits

Philosophical measurement and statistical concepts of common methods of experimental and non-experimental research. Design and execution of project required.

Prerequisite: PSY 201 or equivalent.

Offered: fall & spring.

PSY 203 Lifespan Developmental Psychology 3 Credits

Psychology progresses through the lifespan starting with neonatal development and ending with older adulthood considering physical, cognitive, and psychosocial development at each period in the lifespan.

Offered: fall & spring.

PSY 229 Industrial/Organizational Psychology 3 Credits

Selection, evaluation and training of personnel, facilitation of group dynamics on the job, leadership, worker motivation and effects of workplace environment on performance and morale. Emphasis on student career development.

Offered: fall.

PSY 230 Psychology of Religion 3 Credits

Psychology of Religion covers the measurement, biological processes, triggers, development, and behavioral correlates of religion and spirituality broadly defined.

Fulfills College Core: Field 1 (Religious Studies and Theology)

PSY 235 Health Psychology 3 Credits

Psychology of health-related behaviors, including coping with stress and ill health, physician-patient relationships, compliance with medication and psychological influences on specific disorders. Students conduct personal stress assessments and design interventions.

Offered: spring.

PSY 302 Personality Psychology 3 Credits

Covers modern theories on what personality is, different ways of approaching and assessing personality, how personality develops across the lifespan, causes of individual differences in personality, and the many important things personality influences such as physical and psychological health.

Offered: fall.

PSY 303 Abnormal Psychology 3 Credits

Overview of psychopathology: history, assessment, causes, DSM-IV, clinical symptoms and treatment. Review of major DSM-IV disorders with an emphasis on adults.

Offered: fall & spring.

- PSY 307 Adolescent Psychology** 3 Credits
Physiological, psychological and emotional factors in achieving maturity. Focuses on time frame from pre-puberty to emerging adulthood. Extension of theoretical orientation to adolescent problems. Emphasis on real world problems and solutions. Spring Descriptive statistics, probability, sampling distributions, hypothesis testing and inferential statistics. SPSS for Windows. **Offered:** fall & spring.
- PSY 310 Applied Behavioral Analysis** 3 Credits
This course focuses on the principles of applied behavior analysis and their application in classroom and home environments. Students receive in-depth instruction in functional behavioral assessments as well as the application of ABA principles to intervention, skill acquisition, and data management. **Offered:** spring.
- PSY 312 Autism Spectrum Disorders and Developmental Disabilities** 3 Credits
This course provides an overview of the comprehensive needs and characteristics of and treatments for individuals with autism spectrum disorders (ASDs). **Offered:** fall.
- PSY 318 Social Psychology** 3 Credits
The self in social interaction: social perception and cognition, development and maintenance of relationships, attitudes, prejudice, social influence, group dynamics and related gender issues. This course also counts for WST credit. **Offered:** spring.
- PSY 320 Cultural Psychology** 3 Credits
Humans learn from our cultures in all aspects of our lives. Choosing a mate, political attitudes, prejudices, and even basic perceptions all depend on cultural learning. In all our actions we rely on ideas, values, strategies, feelings, and goals that have been shaped by our cultures. We cover both the psychological universals and the variations across cultures. **Fulfills College Core:** Core Capstone **Offered:** spring.
- PSY 322 Prosocial Behavior** 3 Credits
This course will examine the scientific evidence for what motivates people to behave in ways that benefit others. Topics include altruism, psychopathy, preferences for fairness, and the neuroscientific underpinnings of morality
- PSY 323 Motivation and Emotion** 3 Credits
Covers behavioral, cognitive and physiological theories of motivation and emotion with special focus on humanistic motivational theories. Through course activities and assignments, students will apply the theories learned in class to their own behaviors, examine the nature and progress made on their personal goals during the semester and understand the dynamic interplay between goal- directed behavior and emotion. **Offered:** spring.
- PSY 324 Cognitive Psychology** 3 Credits
The psychological processes that enable us to acquire, store, retrieve and use knowledge. Topics include perception, attention, memory, language, thinking, and decision making. Applications in education, psychopathology. **Offered:** fall.
- PSY 326 Psychology of Memory** 3 Credits
Examines the findings from laboratory research to gain a better understanding of the structure and organization of memory. Topics include working memory, encoding and retrieval processes, implicit memory and multiple memory systems, reconstructive processes in memory, eyewitness memory, developmental changes in memory, neuropsychological correlates of memory and memory disorders, source memory, memory improvement, and the repressed/recovered memory controversy. **Offered:** spring.
- PSY 329 Leadership and Motivation** 3 Credits
Determinants of leadership effectiveness, factors influencing effectiveness in maintaining leadership position, influencing followers and accomplishing group objectives. Emphasis on communication competencies, group interaction, experiential learning. **Prerequisite:** PSY 101 or PSY 102, & junior or senior standing. **Offered:** spring.
- PSY 334 Child, Family and Community Psychology** 3 Credits
Effects of social and non-social environments on emotions, thoughts and behaviors. Psychological reactions and adjustments to the nature of community life. Deals with social problems such as AIDS, alcoholism and child and elder abuse. Also counts for CRJ credit. **Offered:** fall.
- PSY 360 Psychology and Law** 3 Credits
Examines issues of considerable importance to the criminal justice system using empirical techniques from psychology. Topics include the conviction of the innocent, lie detection, the death penalty, the insanity defense, civil commitment, eyewitness memory, false and repressed memories, children in the courtroom, jury decision-making, and expert testimony. **Offered:** spring.
- PSY 365 Psychology of Aging** 3 Credits
The arrival of the Baby Boomers at the top of the demographic pyramid has brought a growing focus to the study of aging. Gerontologists have long stressed the heterogeneity of the elderly population. People enter late life with the accumulated experience gained over six or seven decades - experiences that affect their attitudes, behaviors and resources. Wars, economic downturns, technology and cultural change have shaped the experience of old age for the cohort of elderly, but also the unique biographies of older individuals. The social gerontological approach to the study of late life allows students to understand the ways in which the larger society shapes the course and development of individuals. The course will portray the images of aging as presented in literature, film and music. **Fulfills College Core:** Core Capstone
- PSY 370 Introduction to School Psychology** 3 Credits
An introduction to the field of school psychology including historical foundations, current issues, principles of assessment and service delivery models. This course focuses heavily on applying the scientific method and principles and evidence-based practice to psychology in schools. Issues involving schools as systems, cultural diversity, human exceptionalities, professional standards, legal/ethical considerations, and the interrelationship between general and special education are emphasized. **Offered:** spring.
- PSY 373 Behavior Modification** 3 Credits
The application of conditioning principles to changing human behavior and cognitions, with an emphasis on practical problems. **Offered:** fall.

PSY 384 Child & Adolescent Psychopathology 3 Credits

This course will introduce students to the signs and symptoms of various psychiatric disorders of childhood and adolescence (e.g., conduct disorder, ADHD).

Offered: fall & spring.

PSY 391 Biopsychology of Stress 3 Credits

This course is designed to give students an understanding of the physiological and psychological components and effects of short-term and long-term stress. Material includes effects of stress on cardiovascular, digestive, reproductive, endocrine, and immune systems.

PSY 395 Assessment in the Behavioral Sciences 3 Credits

Addresses fundamentals of classic test theory, scaling, reliability, and validity and provides an overview of measures of intelligence, achievement, and personality for clinical, educational, and research use.

Prerequisite: PSY 201.

Offered: fall & spring.

PSY 397 Neurobiology of Mental Disorders 3 Credits

Examines the role of the putative biological underpinnings of the symptoms, etiology and treatment of various mental disorders. Includes introduction to neuroanatomy, neurophysiology, and neurotransmitter systems.

Offered: fall.

PSY 398 Neurobiology of Childhood Mental Disorders 3 Credits

This course is a sequel to Neurobiology of Mental Disorders and focuses on the neurobiological underpinnings of several developmental and other mental disorders affecting children today. PSY 397 or a Behavioral Neuroscience/ Neuropsychology course is a prerequisite.

Offered: spring.

PSY 401 Advanced Statistics Seminar 3 Credits

Topics include bivariate and multiple regression, least-squares estimation, model-building techniques, assumptions and diagnostics, mediation and moderation, the logistic model and exploratory factor analytic techniques. SPSS will be used throughout. Students will conduct a final research project through secondary analysis of a large national data set.

Offered: spring.

PSY 406 Positive Psychology 3 Credits

Seminar course focusing on topics such as happiness, optimism, resilience and courage. Considers what makes a life meaningful and ways to achieve a positive life.

Offered: spring.

PSY 410 Fundamentals of Human Neuropsychology 3 Credits

An advanced course that provides students with a perspective on the neural mechanisms underlying behavior. Material covered in the course will include (but not be limited to) structure and function of the brain from the cellular to the structural levels, brain imaging techniques, and brain development, plasticity and neurological disorders.

Offered: spring.

PSY 431 Sensation and Perception 3 Credits

This course is an introduction to sensory systems and perceptual processes. Course focuses on each of the major sensory systems, beginning with the anatomy and physiology of the sense organ, and builds up to how we represent that information in the mind.

Offered: spring.

PSY 452 Techniques of Counseling 3 Credits

Foundations of counseling and psychotherapy with an emphasis on the mastery of technique and practical applications. Assessment and treatment planning to facilitate cognitive, emotional and behavioral change for a variety of patient populations.

Offered: fall.

PSY 453 Theories of Counseling 3 Credits

The theoretical background of selected counseling techniques. (Psychodynamic, behavioral, family systems) Students will form their own personal theories.

Offered: spring.

PSY 470 Controversial Issues 3 Credits

This course will address some of psychology's controversial topics in order to illustrate how psychologists address and debate the core issues. As is the case in complex human affairs, there are no easy answers, simple solutions or quick resolutions. You will use critical thinking and information literacy skills to arrive at answers to some of the most interesting and perplexing issues in psychology today. Come prepared to read, research, write, discuss and debate. Registration is restricted to Psychology Seniors. Others can request permission of instructor.

Fulfills College Core: Core Capstone

PSY 495 Guided Research in Psychology 1-6 Credits

Opportunity for students interested in designing and conducting empirical research to collaborate with faculty in research activities leading to undergraduate or professional conference presentations and possible publication.

Prerequisite: PSY 101, PSY 102, PSY 201, PSY 202, junior or senior status, & permission of instructor.

Offered: fall, spring, & summer.

PSY 497 Advanced Experimental Psychology 3 Credits

Intended for advanced students with the interest, prerequisites and commitment to experimental research. Involves students in hands-on data collection and statistical analysis.

Prerequisite: PSY 101, PSY 102, PSY 201, PSY 202, PSY 401, junior or senior status, & permission of instructor.

Offered: fall.

PSY 498 Psychology Practicum 6 Credits

Internships are available in clinical counseling psychology, forensic psychology, industrial/organizational psychology, school psychology, and sports psychology. Joint supervision by staff members and agency personnel. Registration requirements vary; six credit maximum. Please click on this link to find out how to register for a practicum <http://canisiuspsychology.net/psychwiki/PracticumRequirements>.

Prerequisite: permission of chair or supervising faculty member.

Offered: fall, spring, & summer.

PSY 499 Independent Study 3 Credits

Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

Offered: fall, spring, & summer.

General Psychology Minor

The general Psychology Minor is for non-Psychology Majors only. Elective courses for this minor must be approved by the student's Psychology Department advisor.

PSY 101	Introduction to Psychology I	3
PSY 102	Introduction to Psychology II	3
Psychology electives (Psychology advisor approval): four courses		12

Industrial-Organizational Psychology Minor

This interdisciplinary collaboration between the Departments of Psychology and Management/Marketing is for students who expect to work in any kind of organization, a human services agency, a law firm, a hospital, etc. The application of psychology in a business environment is most directly apparent in the field of human resources, but the subject matter relates to all work environments. Courses in the minor cover how employees are selected and placed, the training of employees, performance evaluation, interpersonal interaction and employee relation, motivation and job satisfaction, etc. Students with the minor are well prepared to succeed in any kind of organizational environment.

The Industrial/Organizational Minor consists of seven courses.

PSY 229	Industrial/Organizational Psychology	3
PSY 318	Social Psychology	3
PSY 329	Leadership and Motivation	3
PSY 395	Assessment in the Behavioral Sciences	3
MGT 360	Organizational Behavior	3
MGT 364	Human Resources Management	3
MGT 460	Ethical Power and Influence for Leaders	3

Note: Students may not take PSY 229 and MGT 360 in the same semester.

Additional optional courses that students may find useful include PSY 373, PSY 452, ECO 101, ECO 102, ACC 201, ACC 202, COM 319, MKT 201, MKT 320, MKT 331, MGT 367, ENT 401.

Neuropsychology Minor

The Neuropsychology minor is designed to attract students who are interested in pursuing careers in the fields of clinical and cognitive neuropsychology as well as to enhance understanding of brain/behavior relationships for those aspiring to other health-related professions.

In addition to the four foundation courses (PSY 101, PSY 102, PSY 201, PSY 202) and fulfillment of the Core Area requirement, students will be expected to complete the following courses:

BIO 114 & 114L	Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
PSY 410	Fundamentals of Human Neuropsychology	3

Four courses from the following including one from list A and one from list B

List A

PSY 391	Biopsychology of Stress	
PSY 397	Neurobiology of Mental Disorders	
PSY 398	Neurobiology of Childhood Mental Disorders	
PSY 498	Psychology Practicum (hospital or clinical setting internship)	

List B

PSY 324	Cognitive Psychology	
PSY 326	Psychology of Memory	
PSY 431	Sensation and Perception	

School Psychology Minor

Open to Psychology majors or non-majors with appropriate background coursework, this minor focuses on psychology's role in the field of education. Students gain knowledge of psychological development, applied behavior change, and different types of psychological and educational assessment. The required practicum experience must take place in a school setting. This minor is of particular value to students interested in education, testing or working with children.

Non Psychology Majors must first complete PSY 101 and PSY 102 Introduction to Psychology I and II and then proceed to the 6 required courses.

PSY 201	Basic Statistics for Behavioral Sciences	3
PSY 203	Lifespan Developmental Psychology	3
PSY 370	Introduction to School Psychology	3
or PSY 334	Child, Family and Community Psychology	
PSY 373	Behavior Modification	3
PSY 395	Assessment in the Behavioral Sciences	3
	Psychology Practicum in School Psychology	3

Sports Psychology Minor

The sports psychology minor provides students interested in psychology and physical education with an interdisciplinary approach to the study of sport, physical activity, health psychology, exercise psychology or coaching. The minor ideally prepares the student for careers in coaching or sport psychology. Students may seek advisement from the Psychology Department or the Department of Kinesiology.

SPORTS PSYCHOLOGY MINOR

PSY 101	Introduction to Psychology I	3
PSY 102	Introduction to Psychology II	3
PSY 201	Basic Statistics for Behavioral Sciences	3
PSY 202	Research Methods in Psychology	3
PSY 318	Social Psychology	3
PSY 329	Leadership and Motivation	3
PSY 373	Behavior Modification	3
Total Credits		21

Religious Studies and Theology

Chair: Rebecca Krawiec, PhD

INTRODUCTION

Religion plays an important role in human life and history. A strong liberal education requires introduction to the intellectual analysis of this important dimension of human existence. A major in religious studies and theology provides a broad intellectual context for those who wish to study religion in greater depth. The major program offers study and appreciation of Roman Catholicism, other sects of Christianity including Eastern Orthodoxy, Jewish religious thought, the Islamic tradition, and surveys of other religions. This approach involves the comparative study of religions and a positive approach to the varieties of non-religion, such as atheism. The department provides the opportunity for a critical appraisal of religious faith through the study of primary source materials — scriptural, historical, and theological — and the use of interdisciplinary methodologies, such as anthropology, sociology,

and psychology. The department also expresses the religious dimension of the college's founding in the Jesuit and Catholic tradition. Its orientation is to serve the community that shares the values of that tradition. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Religious Studies and Theology website (<https://www.canisius.edu/academics/programs/religious-studies-and-theology>).

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Religious Studies and Theology.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Religious Studies and Theology majors have often majored in Communications, Education, History, Philosophy, or Psychology.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

(10 Courses)

Required Courses

RST 200	Introduction to the Hebrew Bible	3
RST 201	Introduction to the New Testament	3
RST Course in a non-Christian contemporary religion		3
RST 400	Religious Studies and Theology Seminar	3
RST 489	Projects for Majors	3

Electives

5 free electives chosen from any course listed under Religious Studies and Theology courses (RST 101 may not be included)	15
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Total Credits	30
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We invite you to meet with the chair or relevant professor to choose electives for the major that align with your interests.

ADDITIONAL COURSE CONSIDERATIONS

The Department has no required foreign language course(s) for its majors, but it strongly encourages all majors, if they are considering seminary or graduate study in theology or religion, to take a foreign language that is especially relevant to a student's interest in the discipline, such as Biblical Hebrew, Greek, Latin, or a modern foreign language. Greek and Latin are offered through the Classics Department and modern foreign languages through the Department of Modern Languages, Literatures and Cultures. Biblical Hebrew is offered on demand when there is sufficient student interest through the Religious Studies and Theology Department

The Department also offers courses for credit through the Institute for the Global Study of Religion. These are immersion experiences, often abroad, and are offered on a rotating basis. Please contact Dr. Timothy Wadkins for further information.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
RST 101	RST 200

Sophomore

Fall	Spring
RST 201	RST Course in a non-Christian contemporary religion

RST Elective

Junior

Fall	Spring
RST 400	RST Elective
RST Elective	RST Elective

Senior

Fall	Spring
RST 489	RST Elective

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Religious Studies and Theology majors will know the scriptures which form the foundation of Judaism and Christianity, as well as the basic insights of at least one other world religion.

Students will:

- **Objective A:** Students will demonstrate understanding of the scriptural traditions of the Hebrew Bible;
- **Objective B:** Students will demonstrate understanding of the scriptural traditions of the New Testament;
- **Objective C:** Students will demonstrate understanding of the religious teachings of a religion other than Christianity.

Student Learning Goal 2

Religious Studies and Theology majors will be critical thinkers about religion.

Students will:

- **Objective A:** Describe the context of a particular religious or theological question and develop a thesis in response to the question;
- **Objective B:** Analyze alternative viewpoints of the issues raised by the question and construct a logical defense of the argument;
- **Objective C:** Draw warranted conclusions from the evidence gathered.

Student Learning Goal 3

Religious Studies and Theology majors will do scholarly research and writing in Religious Studies or Theology.

Students will:

- **Objective A:** Use a major theory or a theoretically-based method from the academic study of religion as part of an analysis of a religious or theological question;
- **Objective B:** Demonstrate understanding of intellectual property and present evidence in a fair and ethical manner;
- **Objective C:** Cite sources in an appropriate documentation style.

The Religious Studies and Theology Department offers a minor for non-majors in Religious Studies and Theology. The department is also the administrative center for an Interdisciplinary Minor in Catholic Studies that is open to students in any major.

- Religious Studies and Theology Minor (p. 223)
- Interdisciplinary Minor in Catholic Studies (p. 222)

RST 101 Introduction to Religious Studies and Theology 3 Credits

An academic introduction to the nature and role of religion in human life and society, including the Jesuit and Catholic traditions as well as other world religions.

Offered: fall & spring.

RST 200 Introduction to the Hebrew Bible 3 Credits

Introduction to the literature of the Hebrew Bible within its ancient Near Eastern setting. Particular attention paid to historical, literary, cultural, and theological questions.

Prerequisite: RST 101.

Fulfills College Core: Field 1 (Religious Studies and Theology), Global Awareness

RST 201 Introduction to the New Testament 3 Credits

Introduction to the literature of the New Testament, the socio-historical context that produced it, and its use as a historical source for the study of the early Christian movement.

Prerequisite: RST 101.

Fulfills College Core: Field 1 (Religious Studies and Theology)

RST 219 History of Eastern Orthodox Christianity 3 Credits

Historical study of Eastern Christian Churches.

Prerequisite: RST 101.

Fulfills College Core: Field 1 (Religious Studies and Theology), Global Awareness

RST 220 Introduction to Eastern Religions 3 Credits

This survey course will introduce students to the range and complexity of some of the religious traditions associated with South, Southeast and East Asia. Students will encounter a wide variety of primary and secondary sources describing these religious traditions and experiences, including sacred texts, mythology, medieval devotional poetry, and more.

Prerequisite: RST 101.

Fulfills College Core: Field 1 (Religious Studies and Theology), Global Awareness

RST 221 Native American Religions 3 Credits

The nature of indigenous religions in Native American societies and the effect of cultural change through contact with other cultures.

Prerequisite: RST 101.

Fulfills College Core: Field 1 (Religious Studies and Theology)

RST 222 African Religions 3 Credits

Thematic study of religion in tribal societies. Primary emphasis on African, American Indian, and Pacific Island traditions.

Prerequisite: RST 101.

Fulfills College Core: Field 1 (Religious Studies and Theology), Global Awareness

RST 224 Islam: Tradition and Revival 3 Credits

In this course, after an introduction to the foundations of Islam, we will investigate this diversity through the study of Islamic scriptures, Muslim cultures, social institutions, religious practices, and Muslim and Western writings about them in order to better understand Islam and Muslims in the U.S. and throughout the world. Also accepted for Anthropology major and minor credit.

Prerequisite: RST 101.

Fulfills College Core: Field 1 (Religious Studies and Theology), Global Awareness

RST 229 Religious Perspectives on Animals 3 Credits

This course will focus on the historical and cultural relationship between the world's religions and the animal realm.

Prerequisite: RST 101.

Fulfills College Core: Field 1 (Religious Studies and Theology)

RST 230 Catholic Belief Today 3 Credits

Based on the Creed, this course examines the fundamental articles of faith. They include faith itself, the Bible, church tradition; the one God as Trinity, revealed in Jesus, and present through the Holy Spirit; the church as a structured and prayerful community, with seven sacraments.

Prerequisite: RST 101.

Fulfills College Core: Advanced Writing-Intensive, Field 1 (Religious Studies and Theology)

- RST 231 Introduction to Catholic Studies** 3 Credits
Major movements and personalities in Catholic theology, history, culture, and spirituality. How the Catholic church came to be what it is today. The Catholic world-view and its relation to modern society.
Prerequisite: RST 101.
Fulfills College Core: Advanced Writing-Intensive, Field 1 (Religious Studies and Theology)
- RST 234 Christians (En) Countering Injustice** 3 Credits
An examination of Christian concepts of justice and a consideration of how to build or restore justice when injustices occur. Service learning required.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology), Justice
- RST 235 Religion and Politics** 3 Credits
Interaction of religion and politics in the United States and other cultures.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology), Justice, Oral Communication
- RST 236 Theology and European Film** 3 Credits
Analysis of a selection of foreign films to understand the artists' positions regarding the nature of humanity, of God, and of other theological themes.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
- RST 237 Images of Jesus in Film and Art** 3 Credits
Development of artistic representations of Jesus and other Biblical persons along with Christian concepts and themes. Selection of European and American films as well as pertinent art from Western Christianity.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
- RST 240 Development of Jewish Religious Thought and Practice** 3 Credits
Jewish religious thought and practice from biblical times to the present, including modern trends in Judaism.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
- RST 242 Introduction to the Spirituality of Business** 3 Credits
Offers some suggestions about how Christianity and its spirituality, based on a vision of ultimate reality, provides practical wisdom to make wise decisions and develop the virtues necessary for happiness in a world where business contextualizes many of our decisions--as employers, employees, investors, and customers.
Prerequisite: RST 101.
Fulfills College Core: Ethics, Field 1 (Religious Studies and Theology)
- RST 314 New Testament in Literature and Art** 3 Credits
New Testament themes and personalities analyzed from a scriptural perspective and compared with expressions in the arts. Relationship of religion and art, scriptural roots of Christian art.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
- RST 324 Biblical Archaeology** 3 Credits
An investigation of cultures and artifacts related to the texts of the Bible. We will discuss archaeological procedures and principles and examine how archaeological evidence from the Ancient Near East helps us understand the Bible and in some cases how it supports or challenges the biblical narratives.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
- RST 325 Early Christianity** 3 Credits
Historical study of the development of Christianity from its first century roots to its rise as the dominant religion of the Roman Empire.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
- RST 327 Modern Global Christianity** 3 Credits
Historical study of the life, thought, and worship of Christians, both Protestant and Catholic, from the Reformation to the present.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
- RST 340 Moral Issues Today** 3 Credits
Inquiry into Catholic theological moral theories and exploration of several moral problems.
Prerequisite: RST 101.
Fulfills College Core: Ethics, Field 1 (Religious Studies and Theology)
- RST 341 Catholic Social Ethics: Theological Perspectives** 3 Credits
Study of the principles of Catholic Social Teachings articulated in papal and episcopal documents with contemporary applications.
Prerequisite: RST 101.
Fulfills College Core: Advanced Writing-Intensive, Field 1 (Religious Studies and Theology), Justice
- RST 342 Theological Ethics and Environmental Justice** 3 Credits
Investigation of the models of theological ethics and the ways in which ethics informs human interaction with the environment.
Prerequisite: RST 101.
Fulfills College Core: Ethics, Field 1 (Religious Studies and Theology), Oral Communication
- RST 343 Franciscan Reply to Science** 3 Credits
Retrieving the mystical worldview of St. Francis of Assisi via a history of science, philosophies of science, and theology of creation.
Prerequisite: RST 101.
Fulfills College Core: Ethics, Field 1 (Religious Studies and Theology)
- RST 345 Bio-Moral Problems** 3 Credits
Inquiry into Catholic theological moral theories and application of theories to problems raised by bioethics and by health care.
Prerequisite: RST 101.
Fulfills College Core: Ethics, Field 1 (Religious Studies and Theology)
- RST 353 Seven Signs of Love** 3 Credits
The presence of God in the midst of the human community, as symbolized by the sacraments. Their history, interpretation, and anthropology.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology), Justice
- RST 355 The Problem of Suffering** 3 Credits
Suffering confronts each individual in illness, broken relationships, failures, drug abuse and death. The course addresses how God is active even in suffering.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology)
- RST 360 Magic, Science and Religion** 3 Credits
This course will introduce students to some of the diverse ways that cultures of the world create meaning from the chaos of the apprehended world, as well as some of the approaches that scholars of religion utilize to understand those processes. We will focus not only on 'exotic' societies and peoples, but also explore the meanings of magic, science and religion in more familiar contemporary North America.
Prerequisite: RST 101.
Fulfills College Core: Field 1 (Religious Studies and Theology), Global Awareness

RST 390 Christian Marriage 3 Credits
Concentrated investigation of Christian and Catholic marriage. Examination of the history, ideas, ideals, and practices about marriage. Relevant questions from perspectives of justice, ethics, diversity, and global awareness.

Fulfills College Core: Core Capstone

RST 391 Religious Diversity in Buffalo 3 Credits
Exploration of religious diversity in Buffalo, the United States, and the world. May include visits to congregations to observe worship and interviews to learn about religious beliefs, practices, and experiences of interactions with other religious communities.

Fulfills College Core: Core Capstone

RST 392 Liberation Theologies 3 Credits
Study of the origins and development of Liberation Theology in Latin America and the ways in which it evolved among other racial, ethnic, and gender groups in the United States and elsewhere. Special attention to issues of ethics and social justice.

Fulfills College Core: Core Capstone

RST 393 Catholic Concept of Conscience 3 Credits
Study of the Catholic understanding of conscience during the past 50 years. Discussion of both personal and public ethics.

Fulfills College Core: Core Capstone

RST 400 Religious Studies and Theology Seminar 3 Credits
A seminar for RST majors and minors. This class is an advanced level seminar that will focus on some of the most influential theoretical and methodological approaches in the field.

Prerequisite: RST 101. **Restriction:** must be a religious studies and theology major or minor or obtain permission of the instructor.

Fulfills College Core: Field 1 (Religious Studies and Theology)

RST 489 Projects for Majors 3 Credits
Concentrated investigation of a topic of particular interest to the student, under supervision of faculty advisor.

Prerequisite: RST 101 & departmental approval. **Restriction:** must be a religious studies and theology major or minor or obtain permission of the instructor.

Offered: fall & spring.

RST 496 Internship 3 Credits
Combination of teaching or religious work with special readings and theological reflection, under the guidance of department faculty. Internships require an application and approval by the associate dean.

Prerequisite: RST 101 & permission of both the department chair & associate dean. **Restriction:** must be a religious studies and theology major or minor or obtain permission of the instructor.

Offered: fall & spring.

RST 499 Independent Study 1-3 Credits
Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

Interdisciplinary Minor in Catholic Studies

Director: Nancy M. Rourke, PhD

The Catholic Studies minor (<https://www.canisius.edu/academics/programs/catholic-studies>) at Canisius College examines the doctrinal, historical, legal, spiritual and cultural traditions of Catholicism.

In addition, it includes “dialogue” with people of other faiths and the examination of intellectual disciplines that have been influenced by Catholicism, such as art, history, law, literature, politics, philosophy and the sciences. As a result, this program requires study in several departments of the college and highlights the Catholic tradition upon which the college was founded.

Any person who wishes to know more about the Catholic heritage, to further one’s personal development, or to pursue a principle-based career in public service, medicine, journalism or law would find this minor relevant. Those pursuing church-related careers or academic objectives would also want to complete this program. Future seminarians, lay ministers, and teachers interested in the Catholic educational system, those preparing for graduate work in theology or religious studies and anyone planning to pursue an administrative, marketing, accounting, or IT career in a Catholic organization such as a social work agency or health care system would benefit from this program. The program director will help the student choose appropriate courses or appoint an advisor to do so.

Each student who completes this minor will:

1. Be knowledgeable about some facet of Catholic doctrine or piety and the relevance of a concept that originates from the Catholic philosophical or social traditions;
2. Be able to think critically about the Catholic contribution in one area of history or culture;
3. Become an effective scholarly researcher and writer about Catholicism and its intellectual heritage.

All courses in the Catholic Studies minor except CTH 400 are offered in traditional academic departments and usually meet the criteria established by these departments for field studies or major credit. Most courses in the minor are also part of the college’s core curricula and therefore can also be taken as a way to fulfill core requirements.

In addition, language and reading courses in Latin and Greek are strongly recommended.

Please contact Dr. Nancy Rourke (rourken@canisius.edu) (716-888-2460) in the Department of Religious Studies and Theology for a more detailed description of the program, including course descriptions, possible course substitutions, and ways students have benefitted from this minor in recent years.

STRUCTURE OF THE CATHOLIC STUDIES MINOR

RST 231	Introduction to Catholic Studies	3
CTH 400	Research in Catholic Studies	3
Select one course in each of the following areas (but no more than two courses from any one department in these areas):		
Catholic Theology and Life		
Catholic Culture: Literature, Art, Music & Science		
Catholic History & Politics		
Catholic Philosophy & Social Thought		

Total Credits 18

Courses that Fulfill Catholic Theology and Life

HON 359	Spiritual Autobiography	3
RST 230	Catholic Belief Today	3
RST 353	Seven Signs of Love	3
RST 390	Christian Marriage	3

Courses that Fulfill Catholic Culture: Literature, Art, Music and Science

ENG 233	The Quest in Medieval Literature	3
ENG 220	Contemporary Catholic Fiction	3
ENG 331	Studies in Irish Literature	3
FAH 213	Greek and Roman Art	3
FAH 224	Medieval Art	3
FAH 245	Renaissance Art	3
FAH 248	Baroque Art	3
FAM 216	Medieval and Renaissance Music	3
HON 242	Cultural Constructions of Jesus	3
RST 237	Images of Jesus in Film and Art	3
RST 314	New Testament in Literature and Art	3
RST 343	Franciscan Reply to Science	3

Courses that Fulfill Catholic History and Politics

CLS 104	Roman History	3
CLS 308	Pagans and Christians	3
HIS 106	The Medieval World	3
HIS 131	Latin American History to 1830	3
HIS 226	History of Ireland	3
HIS 306	American Religious Experience	3
HON 246	American Religions	3
HON 316	Famous Jesuits	3
HON 356	Pope Francis: 21st-Century Thinker	3
RST 235	Religion and Politics	3
RST 325	Early Christianity	3
RST 327	Modern Global Christianity	3

Courses that Fulfill Catholic Philosophy & Social Thought

HON 360	Topics in Modern Christianity	3
PHI 267	Catholic Social Thought	3
PHI 302	Medieval Philosophy	3
RST 340	Moral Issues Today	3
RST 341	Catholic Social Ethics: Theological Perspectives	3
RST 342	Theological Ethics and Environmental Justice	3
RST 345	Bio-Moral Problems	3
RST 392	Liberation Theologies	3
RST 393	Catholic Concept of Conscience	3

Religious Studies and Theology Minor

The Minor requires six courses, including RST 101.

Required Course

RST 101	Introduction to Religious Studies and Theology	3
Electives		
5 upper level (200 or above) RST courses		15
Total Credits		18

We invite you to meet with the chair or relevant professor to design a minor that aligns with your interests. We particularly encourage minors to choose courses that integrate with their major, for example, world religions alongside international relations or courses on religion and science, biomedical issues, and the environment for science majors.

Social Sciences Program

The social science program of courses deals with mankind's political, social, economic and psychological interrelatedness as studied in the fields of sociology, anthropology, history, political science, communication studies, economics and psychology. Students in this program develop and refine their insights into human behavior through a wide range of social observation, inquiry and study. By allowing a considerable degree of freedom in choosing electives, the program permits a meaningful flexibility not found in more restrictive curricula.

QUALIFICATIONS

Students must maintain an overall 2.0 cumulative average to graduate with a degree from Canisius.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Students interested in pursuing this degree at either the major or Associates level should contact an Associate Dean in the College of Arts and Sciences.

The associate of arts degree program in social sciences requires the completion of 60 credits of coursework. This program has two basic purposes:

1. It offers an immediate degree goal for students seeking a general introduction to the social sciences (psychology, sociology, political science, economics, and anthropology); and
2. It provides a basic foundation for those who wish to go on for a bachelor's degree.

The program contains a second track designed for the prospective business major. Students who plan baccalaureate studies in the future are encouraged to choose the track which is more appropriate for them. If a student remains at Canisius College, all of the coursework in the associate degree program is transferable and applicable to the bachelor's program.

SOCIAL SCIENCES CURRICULUM (ASSOCIATE DEGREE)

Core Curriculum Requirements

All students complete Core Curriculum requirements as part of their overall Canisius Education. These requirements can be found at the Core Curriculum website (<http://www.canisius.edu/academics/core>).

Major Course Requirements

(8 courses)

Social Sciences Track

Required Courses

MAT 106	Calculus for the Non-Sciences	3
MAT 131	Statistics for Social Sciences	3

Social Science Electives

Select three of the following area sequences: 18

ECO 101 & ECO 102	Principles of Macroeconomics and Principles of Microeconomics	
PSY 101 & PSY 102	Introduction to Psychology I and Introduction to Psychology II	
PSC 103 & PSC 104	The American Constitution and American Political Process	6
SOC 110 & SOC 111	Introduction to Sociology and Contemporary Social Problems	
ANT 121 & ANT 122	Biological Anthropology and Sociocultural Anthropology	

Total Credits 30

Business Track

Required Courses

MAT 105	Finite Mathematics	3
MAT 106	Calculus for the Non-Sciences	3
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
ACC 201	Financial Accounting	3
ACC 202	Managerial Accounting	3

Electives

2 courses from the business core

Total Credits 18

Free Electives

Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 60 credit hours for graduation. Students may graduate with more but not less than 60 credit hours.

OTHER ASSOCIATE'S DEGREE REGULATIONS

The basic residency requirement for A.A. degrees is 30 credit hours, at least 15 of which must be completed in traditional classroom situations. No more than 30 credits may be transferred from another institution. Not all courses at other institutions are applicable to the associate degree, and transfer students are required to have a transfer evaluation completed by the college.

For more information contact the dean in the College of Arts and Sciences.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

(21 courses)

Basic Social Sciences

Select four courses each from four of the following departments, for a total of 16 courses: 48

Anthropology:

ANT 121 & ANT 122	Biological Anthropology and Sociocultural Anthropology
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Plus two 300/400 level courses

Communication Studies:

Select two of the following:

COM 201	Oral Communication
COM 202	Communication Theory
COM 203	Writing for the Public Media
COM 204	Interpersonal Communication
COM 205	Mass Communication and Society
COM 206	Introduction to Research Methods

Plus two 300/400 level courses

Economics:

ECO 101 & ECO 102	Principles of Macroeconomics and Principles of Microeconomics
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Plus two 300/400 level courses

History:

HIS 123 & HIS 124	History of the United States: The Colonial Period to Reconstruction and History of the United States: 1877 to the Present
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Plus two 300/400 level courses

Political Science:

PSC 103 & PSC 104	The American Constitution and American Political Process
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Plus two 300/400 level courses

Psychology:

PSY 101 & PSY 102	Introduction to Psychology I and Introduction to Psychology II
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Plus two Psychology courses above 100 level

Sociology:

SOC 110 & SOC 111	Introduction to Sociology and Contemporary Social Problems
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Plus two 300/400 level courses

Additional Courses

Three additional 300/400 level courses in one of the chosen departments: Interdisciplinary courses may be substituted for one or more department courses

MAT 131	Statistics for Social Sciences	3
Social Sciences Methods - Select one of the following:		3
PSC 217	Research Methods	
SOC 342	Social Research Methods	
ANT 351	Qualitative Research Methods	
Total Credits		54

Sociology

INTRODUCTION

Sociology is the study of our behavior as social beings, covering everything from the analysis of small groups to the study of global social change. We hold that social forces external to the individual play an important role in shaping behavior and beliefs. Social forces are the economic and political make-up of society, and cultural influences, such as our beliefs, habits, and values. The sociology major prepares students for a wide variety of careers and graduate fields, including sociology, social work, planning, public administration, education, public health, business, and law.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Sociology website (<https://www.canisius.edu/academics/programs/sociology>).

QUALIFICATIONS

Students must have a minimum grade of C in all required courses and maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in sociology.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page ([http://](http://catalog.canisius.edu/undergraduate/minors)

catalog.canisius.edu/undergraduate/minors) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

In addition to the Sociology minor the department also supports two interdisciplinary minors: Child, Family and Community Studies and Peace and Justice Studies.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

MAT 131	Statistics for Social Sciences	3
SOC 110	Introduction to Sociology	3
SOC 111	Contemporary Social Problems	3
SOC 342	Social Research Methods	3
SOC 432	Theories in Sociology	3
SOC 461	Sociology Capstone	1
Six 3 credit sociology electives		18
Total Credits		34

MAJOR ELECTIVES

SOC 234	Environment and Society	3
SOC 273	Social Movements and Social Change	3
SOC 291	Gender and Society	3
SOC 300	Special Topics in Sociology	3
SOC 324	Visual Sociology	3
SOC 340	Sociology of the City	3
SOC 341	Race and Ethnic Relations	3
SOC 390	Marriage and Families	3
SOC 498	Internship	3
SOC 499	Independent Study	3

The following courses in the other departments count as electives for the sociology major. No more than 2 will count towards the sociology major:

ANT 122	Sociocultural Anthropology	3
ANT 351	Qualitative Research Methods	3
ANT 355	Sociolinguistics	3
ANT 365	Gender Issues in Language	3
CRJ 320	Criminology	3
CRJ 354	Juvenile Delinquency	3

ADDITIONAL COURSE CONSIDERATIONS

The department encourages sociology majors to study a foreign language of their choice and to participate in the college study abroad program.

Students considering study abroad should consult with their advisor regarding course sequencing.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
SOC 110	SOC 111

Sophomore

Fall	Spring
MAT 131	SOC elective

SOC elective

Junior

Fall	Spring
SOC 342	SOC elective

SOC elective

Senior

Fall	Spring
SOC 432	SOC 461

SOC elective SOC elective

LEARNING GOALS & OBJECTIVES – SOCIOLOGY

Student Learning Goal 1

Sociology majors will demonstrate that they are able to think critically about sociological concepts.

Students will:

- **Objective A:** apply scientific methodology to the study of sociology
- **Objective B:** evaluate the quality of quantitative and qualitative research in sociology

Student Learning Goal 2

Sociology majors will demonstrate that they have the knowledge necessary for careers or graduate school.

Students will:

- **Objective A:** become familiar with the major concepts, theories, and theorists in sociology.
- **Objective B:** apply sociological theories and methods to real world situations.

Student Learning Goal 3

Sociology majors will appreciate the diverse nature of society.

Students will:

- **Objective A:** conceptualize of diversity today and in the past.
 - **Objective B:** recognize of the vastness of human diversity.
- Sociology Minor (p. 228)

- Interdisciplinary Minor in Peace and Justice Studies (p. 227)

- Social Sciences Minor in Child, Family and Community Studies (p. 228)

SOC 110 Introduction to Sociology

3 Credits

Topics include theory, methods, culture, socialization, race and ethnicity, groups and organizations, and social inequality; analysis of everyday events, using sociological imagination.

Fulfills College Core: Field 5 (Social Sciences)

Offered: fall.

SOC 111 Contemporary Social Problems

3 Credits

Exploration of selected social problems from various sociological points of view, emphasizing some of the sociological concepts and methods employed in analyzing these problems.

Fulfills College Core: Diversity, Field 5 (Social Sciences)

Offered: spring.

SOC 234 Environment and Society

3 Credits

Explores connections between environmental issues and their social causes and consequences. Topics of analysis include environmental racism, environmental health, risk and uncertainty, political economy, globalization and sustainability.

Fulfills College Core: Field 5 (Social Sciences)

Offered: spring.

SOC 273 Social Movements and Social Change

3 Credits

Explores the development of social movements as a force of social change in society. Focus is on theoretical developments in movement theory, as well as explorations of social movements through history.

Fulfills College Core: Field 5 (Social Sciences), Justice

Offered: spring.

SOC 291 Gender and Society

3 Credits

Exploration of origin of gender roles; socialization into masculine and feminine roles; intersection of gender and social institutions such as family, work and education.

Fulfills College Core: Field 5 (Social Sciences)

SOC 300 Special Topics in Sociology

3 Credits

Critical examination of a selected topic in sociology. Subject matter determined by the instructor.

SOC 324 Visual Sociology

3 Credits

Emphasizes a visual approach to analyzing social concepts. Analysis of visual media forms to explore core ideas in sociology such as gender, race, environment, social class, family and global diversity.

Offered: spring.

SOC 340 Sociology of the City

3 Credits

Exploration of how people experience and understand city life, how cities grow and develop, and various issues affecting cities today such as suburbanization and urban sprawl.

SOC 341 Race and Ethnic Relations

3 Credits

Focus is on issues surrounding race and ethnicity in the United States, including the social construction of race and ethnicity, prejudice and discrimination, unequal opportunity structures, and the racial/ethnic makeup of the U.S. population.

Fulfills College Core: Field 5 (Social Sciences)

SOC 342 Social Research Methods

3 Credits

Overview of the major steps in constructing social science research, from developing a research question, operationalization and measurement through data collection and analysis.

Prerequisite: minimum grade of C in MAT 131.

Offered: fall.

SOC 355 Deviant Behavior 3 Credits

Students will explore how societies define some behaviors and characteristics as deviant as well as explanations of social deviance, how societies and groups respond to social deviance. Alternative social science theories about such behavior are compared and contrasted. Research methodologies and findings in recent social-science literature are examined and interpreted.

SOC 390 Marriage and Families 3 Credits

Covers family development from relationship formation through marriage, divorce and remarriage. Includes sexuality, sexual orientation, cohabitation, parenting and the intersection between the family and major social institutions.

SOC 432 Theories in Sociology 3 Credits

Course emphasizes theory development as a tool to understand society. Focuses on major social theorists and their contributions as well as classical and modern theoretical schools in sociology.

Restriction: must be a sociology major or minor with senior standing.

Offered: fall.

SOC 461 Sociology Capstone 1 Credit

Integrating experience for majors; focus is on demonstrating proficiency in the discipline and preparation for post-graduate studies or employment.

Offered: spring.

SOC 498 Internship 3-4 Credits

Opportunity for students to participate in the daily work of an agency or organization. Internships require an application and approval by the associate dean.

Prerequisite: minimum GPA of 2.75, signature of instructor, and approval by both the chair & associate dean.

Offered: fall & spring.

SOC 499 Independent Study 1-3 Credits

Independent studies allow in-depth study of a specific topic and are most often reserved for seniors who cannot otherwise fulfill a graduation requirement. Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

Offered: fall & spring.

Interdisciplinary Minor in Peace and Justice Studies

Director: Erin Robinson, PhD

The Department also supports the interdisciplinary minor in Peace and Justice Studies. Students can benefit from both the global and local focus while pursuing studies of human rights and social justice. Our “Justice in Action” approach helps students apply social science and humanities perspectives to address our world’s most pressing social concerns. For more information please see the Peace and Studies website. (<http://www.canisius.edu/sociology/courses/peace-justice-studies/.html>)

The minor in Peace and Justice Studies is intended to further the mission of the College by preparing students for their role as leaders in the local and global community. Students pursuing this track of the Minor will develop skills, knowledge, and perspective to pursue “Justice in Action.” The program’s focus is on the religious, social science, and humanities perspectives needed to address peace and justice topics.

This minor requires that students complete 6 courses and a capstone course.

Required Courses

SOC 273	Social Movements and Social Change	3
RST 340	Moral Issues Today	3
or RST 220	Introduction to Eastern Religions	

Elective Courses

Skills: Select one from the following list

ANT 351	Qualitative Research Methods	3
COM 201	Oral Communication	3
COM 204	Interpersonal Communication	3
COM 302	Small Group Communication	3
ECO 311	Metropolitan Economic Development and GIS	3
PSY 329	Leadership and Motivation	3

Local: Select one from the following list

SOC 111	Contemporary Social Problems	3
SOC 340	Sociology of the City	3
HIS 382	New York State History	3

Global: Select one from the following list

ANT 122	Sociocultural Anthropology	3
RST 341	Catholic Social Ethics: Theological Perspectives	3
SOC 342	Social Research Methods	3
RST 342	Theological Ethics and Environmental Justice	3

Major Capstone Course 3

Required Courses: It is recommended that the two required major courses be taken towards the beginning of a student’s academic career; however, these courses are not intended to serve as prerequisites for the rest of the program.

Major Electives: Students must choose a methods course if one is not required by their major department. If students choose an additional religious studies course, they must choose a course from a perspective different from the selection in the foundation course, i.e.: Elective should be focused on a non-Christian perspective if they choose RST 340 Moral Issues Today, and vice versa. It is recommended that students take a modern foreign language.

Major Capstone Course: A senior level capstone course will be required of all students. This seminar-style course will be taught by faculty involved in the program and will address all three aspects of Ignatian Pedagogy: experience, reflection, and action.

The requirement for the Capstone Course will be a Capstone Immersion Experience. It will require students to:

- Collectively identify a Peace and Justice issue in the local or global community
- Through a group initiative, develop an action plan to assist the organization and community in its efforts to resolve the issue
- All students will be working with the same organization, as this will be a team approach to their service experience. Students will spend the majority of their course time in the field gaining direct experience with the community. Other course time will be devoted to group discussion and reflection with appropriate academic readings.

Maintaining an Electronic Portfolio:

In the majority of courses completed for this program, students will be required to do a course assignment on an issue of peace and justice in today’s world. Through the ANGEL portfolio tool, students will maintain a multi-year electronic portfolio of these assignments to enhance their

learning. Students should maintain a collection of 7-10 assignments that reflect their progress in the program.

Social Sciences Minor in Child, Family and Community Studies

This social science interdisciplinary minor is co-sponsored by the Department of Psychology and the Department of Sociology, Anthropology and Criminal Justice. It is intended for students seeking a deeper understanding of the dynamics of family relations and the interaction of the family with society. A minor in Child, Family, and Community Studies is useful for individuals interested in collaborative activities designed to improve the well being of children, adults, and families. Issues that may typically be dealt with by people interested in this minor include unemployment, drug and alcohol abuse, child abuse and neglect, domestic violence, juvenile delinquency, and an urban school system that is unable to address the complex needs of the students it serves.

This minor is geared toward students interested in pursuing graduate studies in Social Work (MSW), Counseling Psychology, School Psychology, or Counseling Education. Its mission is to prepare undergraduate students for careers and future graduate studies in the fields of education, social work and social services. Embedded within the interdisciplinary focus of the minor is an emphasis on creating reflective and compassionate practitioners who are committed to the Jesuit ideal of men and women with and for others.

A total of 7 courses is needed for this minor.

Select two from the following list:

PSY 101	Introduction to Psychology I	3
PSY 102	Introduction to Psychology II	3
SOC 110	Introduction to Sociology	3
COM 204	Interpersonal Communication	3

Select two from the following list

PSY 334	Child, Family and Community Psychology	3
COM 304	Family Communication	3
CRJ 337	Violence and the Family	3

Select three courses with one chosen from each area and with two of the three from outside of the students major

Area A: Children

COM 385	Television and Children	3
EDE 100	Human Growth and Development - Birth through Childhood	3
EDS 101	Human Growth and Social Development: Adolescence	3
PSY 203	Lifespan Developmental Psychology	3
PSY 384	Child & Adolescent Psychopathology	3

Area B: Family

CRJ 354	Juvenile Delinquency	3
HSV 201	Introduction to Family Dynamics	3
SOC 390	Marriage and Families	3

Area C: Community

COM 350	Health Communication	3
PSY 370	Introduction to School Psychology	3
SOC 341	Race and Ethnic Relations	3

Sociology Minor

The Sociology minor is an opportunity for students to engage in the field through the taking of 5 classes that provide an overview of the primary areas in sociology. Students must complete:

SOC 110	Introduction to Sociology	3
SOC 111	Contemporary Social Problems	3
3 SOC Electives (2 must be at the 300-400 level)		9
Total Credits		15

Specialized Studies

INTRODUCTION

Specialized Studies enables students to develop their own majors and degree plans by combining courses from different departments to create a focused outcome. Students who find that Canisius does not offer majors that match their interests, talents, future goals and employment niches may propose their own plans of study based on existing coursework. A student does this by seeking the assistance of the associate dean and two faculty members to assist with creating a plan of study and goal counseling.

APPROVAL CRITERIA

This program is available to any Canisius student who wishes to create her/his own field of study, has a cumulative GPA of 2.5 or better, and has secured the approval of at least two faculty members who will support their plans. Incoming students who plan to create a specialized major should matriculate as undeclared and may begin working with an academic advisor and/or a faculty member after the completion of their first semester to start the proposal process. Creating a sound proposal will require:

- An in-depth explanation of future and career goals as well as learning objectives as they relate to the proposed Specialized Studies major.
- An exact list of proposed courses including a detailed narrative outlining the rationale regarding their relation to each other and the student's future goals.
- Two letters of support from Canisius faculty members. The letters should state why this specialized plan makes sense for this student and why the college should have confidence that the student can complete the plan.
- One of the above faculty members must, in writing, agree to be the academic advisor for the student and work with the student to develop a senior project that is relevant to the coursework and intended learning goals.
- A detailed timeline for completion. Prerequisites, sequencing and course offerings must be taken into consideration.

Students shall submit the proposal to their designated faculty advisor, who will submit it and letters of support (see above) for final approval by the appropriate dean(s). If it becomes necessary to adjust the plan, changes must be discussed with and agreed upon by the faculty advisor.

TIME TO COMPLETION

As with any major, Specialized Studies requires a minimum of 120 credit hours and a cumulative GPA of 2.0 or better for graduation.

QUESTIONS

Please direct any questions about the Specialized Studies major to the Dean of Arts & Sciences.

CURRICULAR REQUIREMENTS FOR THE MAJOR

All approved Specialized Studies majors must include the college Core Curriculum. These requirements are described below and can be found at the Core Curriculum website (<http://www.canisius.edu/academics/core>). Students in the All-College Honors Program will follow honors requirements.

Foundations

FYS 101	Explorations of Academic Writing and Special Topics	3
ENG 101	Writing about Literature	3
PHI 101	Introduction to Philosophy	3
RST 101	Introduction to Religious Studies and Theology	3
Total Credits		12

Breadth of Knowledge

Seven Fields (21 credits)

Core Capstone

One course (3 Credits)

Cross-disciplinary Knowledge and Skills Requirements

(six designated courses)

Courses designated for Field or courses that satisfy major or elective credit may carry these designations. Some courses may carry more than one designation. Students must take as many courses as necessary to achieve all six requirements.

Specialized Studies Courses

(36 minimum credits)

- 21 credits must be upper level courses (300-400 level - graduate courses may also be considered).
- 3 credits: Senior Project (see below for details).
- Free electives – 48 or fewer.
- Free electives are courses in addition to the Core Curriculum and major requirements sufficient to reach a minimum of 120 credit hours for graduation.

Note: If a chosen course requires a pre-requisite the student must include this in the plan. No pre-requisite courses are to be waived.

Senior Project

Under the direction of a faculty member, the student must undertake an independent scholarly or creative senior project that is submitted, exhibited, completed, or performed no later than the last day of classes. The project will be subject to peer and professional review in methods appropriate for the fields of endeavor as required by the advisor and faculty member. The student should work with the faculty member to develop a project proposal no later than week six of the semester prior to degree completion (i.e. around November 1st for May graduation).

STUDENT LEARNING GOALS

These are developed as part of the proposal for majoring in Specialized Studies.

Urban Studies

Director: Kevin R. Hardwick, PhD

INTRODUCTION

The urban studies major at Canisius provides students with a variety of approaches and tools that enable them to effectively analyze the 21st century urban center. The coursework examines the social, legal, economic, ethnic and political forces that affect cities and towns, from the challenges of the public education system to housing and real estate development, crime, health issues, human services and transportation. The specialized program helps students understand economic growth and decline, racial and ethnic issues, community development, and other factors that influence the growth and prosperity of a city.

The program offers a solid preparation for graduate programs in public administration, community development and planning, social work, public policy, criminal justice and urban affairs. It is also a recommended choice for pre-law students and for those aspiring to careers in journalism, communications, teaching, government service, social work, law enforcement, community organization and land-use planning, as well as in those industries that are increasingly conscious of the influence of urban society upon them and their impact on urban society. Extensive internship and professional research experiences are an integral component of the urban studies program. Such activities are a vital aspect of preparation for graduate school and/or a professional career. Because the program is designed to be one half of a dual major, students who choose urban studies must also select a second major in another discipline such as criminal justice, economics, political science, history, sociology or anthropology. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Urban Studies website (<https://www.canisius.edu/academics/programs/urban-studies>).

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Urban Studies. Students must also have a second major.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Because the Urban Studies Major is designed to be one half of a dual major, students who choose urban studies must also select a second major in another discipline such as criminal justice, economics, political science, history, sociology or anthropology. The decision to complete a dual major may be based on career goals or planned graduate studies. Before a student declares a dual major it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. In order to

declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

PSC 104	American Political Process	3
ECO 102	Principles of Microeconomics	3
PSC 237	State and Local Politics	3
PSC 334	Public Administration	3
PSC 336	Urban Government and Politics	3
Select one of the following:		3
HIS 237	The Making of Modern America 1865-1920	
HIS 382	New York State History	
HIS 396	Politics and Society in American Film	
HIS 460	The Life and Times of Theodore Roosevelt	
Select one of the following:		3
ECO 310	Introduction to Geographic Information Systems	
ECO 311	Metropolitan Economic Development and GIS	
ECO 411	State and Local Finance	
URS 400	The Urban Challenge	1
Total Credits		22

MAJOR ELECTIVES

Urban Studies Electives: three courses to be chosen from the following

CRJ 227	Criminal Justice I	3
ECO 101	Principles of Macroeconomics	3
ECO 310	Introduction to Geographic Information Systems	3
ECO 311	Metropolitan Economic Development and GIS	3
ECO 411	State and Local Finance	3
FAH 109	History of Architecture	3
HIS 237	The Making of Modern America 1865-1920	3
HIS 382	New York State History	3

HIS 396	Politics and Society in American Film	3
HIS 460	The Life and Times of Theodore Roosevelt	3
PSC 103	The American Constitution	3
PSC 215	National Issues and Public Policy	3
PSC 217	Research Methods	3
PSC 225	U.S. Presidency	3
SOC 111	Contemporary Social Problems	3
SOC 340	Sociology of the City	3
URS 498	Urban Internship	3

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
PSC 104	ECO 102

Sophomore

Fall	Spring
PSC 237	PSC 336

Junior

Fall	Spring
Select one of the following:	PSC 334

HIS 237	URS Elective
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HIS 382

HIS 396

HIS 460

Senior

Fall	Spring
Select one of the following:	URS 400

ECO 310	URS Elective
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ECO 311

ECO 411

LEARNING GOALS AND OBJECTIVES

Student Learning Goal 1

Urban Studies majors will develop knowledge of urban history, economics and politics.

Students will:

- **Objective A:** Demonstrate competency with the conceptual frameworks of urban history;
- **Objective B:** Demonstrate competency with conceptual frameworks of urban economics;
- **Objective C:** Demonstrate competency with conceptual frameworks of urban politics.

Student Learning Goal 2

Urban Studies majors will be able to communicate and work effectively with others.

Students will:

- **Objective A:** Successfully complete a project in concert with others;
- **Objective B:** Communicate effectively in writing both reports and memos;

- Objective C: Communicate effectively in speaking.

URS 400 The Urban Challenge 1 Credit

The culmination of the Urban Studies Program. This course is normally taken during a student's final semester and serves to reinforce connections among various disciplines.

Offered: spring.

URS 498 Urban Internship 3 Credits

Participant observation and evaluation of an urban program or agency. Students devote 10 hours per week to significant activities related to their skills and interests. Internships are by application only and must be approved by the associate dean.

Prerequisite: permission of the chair & associate dean. **Restriction:** placement by urban studies director.

Offered: fall & spring.

Women & Gender Studies Minor

Co-Director: Johanna Fisher, Adjunct Professor

Co-Director: Tanya Loughead, PhD, Professor

The Women & Gender Studies Minor provides an integrated approach to understanding the social, political, and cultural constructions of gender that shape the experiences of women and men. The curriculum offers a solid foundation in critically thinking through the relationships of identity and power and in critically examining and judging the oppressions and injustices that surround us. The Minor thus educates students in becoming “women and men with and for others.”

Fr. Pedro Arrupe, SJ, famously proclaimed that Jesuit education should aim to be “education for justice” and that students should become “able to perceive the serious injustices which are building around the world of men and women in a network of domination, oppression and abuses” that “stifle freedom.” The Women & Gender Studies Minor takes Fr. Arrupe’s call for an education for justice as one of the key features of its mission. Women & Gender Studies courses prepare students for meaningful careers – certainly – but more importantly prepare students for engaging in ethical and just relationships with everyone.

The Women & Gender Studies Minor is an excellent preparation for public-service careers, and is especially useful in any field where understanding diversity is a requirement – though certainly understanding diversity is important in every field and walk of life. Additionally, the minor prepares students for graduate study in social work, law, business and human resources, counseling, and many other fields. The Women & Gender Studies Minor can usually be combined with other majors in order for students to pursue their goals. Please check with your advisors, especially the Women & Gender Studies Co-Directors, to see how either the minor works with your desired academic status and goals. For a more detailed description of the program, courses, faculty, academic and co-curricular opportunities please go to the Women & Gender Studies website (<https://www.canisius.edu/academics/programs/women-and-gender-studies>).

Students who complete the Women & Gender Studies Minor often go into fields where the knowledge of human diversity is respected. Recent Canisius College Women & Gender Studies graduates are in careers such as: law, government and non-profit work, literature and the arts, philosophy, social work, education, counseling, human resources, community organization, medicine, and journalism. Graduates of the program are currently in graduate schools in the following areas:

- PhD in International Law
- PhD in English

- MD
- MBA
- MA in Art History
- MS in Social Work
- MA in Gender Studies
- PhD in Sociology
- PhD in Human Rights Law

ADVISEMENT

All students should meet with one of the Women & Gender Studies Co-Directors as well as Women & Gender Studies faculty in discussing career expectations, choosing their electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

MINOR

The Women & Gender Studies courses emphasize how gender roles are created and how they impact what we know and how we act in the world. Students are encouraged to explore the complexities of our gendered world in a structured series of courses. Learning objectives for the Women & Gender Studies Minor focus on gender, justice and oppression, power, and cultural diversity.

The Women & Gender Studies Minor consists of:

WST 201	Introduction to Women and Gender Studies	3
Four pre-approved Women & Gender Studies courses		12
Total Credits		15

Examples of Women and Gender Studies courses include:

Humanities

CLS 300	Roman Law and Society	3
ENG 223	Images of Women in Literature and Film	3
ENG 306	Eighteenth Century Literature	3
ENG 381	Postcolonial Literature	3
FAH 159	Gender and Art	3
HIS 211	Women In The Western World	3
PHI 240	Justice	3
PHI 272	Gender and Philosophy	3
PHI 273	Race and Philosophy	3
PHI 379	Contemporary Women Philosophers	3
RST 342	Theological Ethics and Environmental Justice	3
RST 345	Bio-Moral Problems	3
SPA 324	Topics in Conversation II: Latin American Culture and Civilization	3
SPA 459	The Body Erotic/The Body Politic: Sexuality as Political Discourse in Latin America and Spain	3
SPA 453	Almodóvar and La Movida: The Films of Pedro Almodóvar	3

Social & Natural Science

ANT 365	Gender Issues in Language	3
BIO 221	Biology of Women	3
COM 304	Family Communication	3
COM 327	Gender Differences in Human Communication	3
CRJ 337	Violence and the Family	3

SOC 291	Gender and Society	3
SOC 390	Marriage and Families	3

LEARNING GOALS & OBJECTIVES

Learning Goal 1

Students will be original thinkers who can re-envision how gender roles interact with social structures, time, race or ethnicity.

Students will:

- **Objective A:** Distinguish the difference between sex and gender;
- **Objective B:** Interpret the ways social structures (such as religion and social class) impact women and men's lives;
- **Objective C:** Explain how historical context interacts with gender roles;
- **Objective D:** Examine how race or ethnicity interacts with gender roles;
- **Objective E:** Analyze how socially-constructed gender norms influence power relationships experienced by individuals.

Learning Goal 2

Students will be problem solvers who investigate culture and society using the lens of gender and social justice.

Students will:

- **Objective A:** Evaluate human interactions using gender as a framework;
- **Objective B:** Apply gender-bases analysis to offer solutions to issues in society and culture.

WST 201 Introduction to Women and Gender Studies 3 Credits

This course places the experiences of women and men at the center of our study by introducing basic concepts and perspectives in the field of women and gender studies. We further focus on the ways in which gender interacts with race, class, sexual orientation, and ethnicity.

Fulfills College Core: Field 5 (Social Sciences)

RICHARD J. WEHLE SCHOOL OF BUSINESS

RICHARD J. WEHLE SCHOOL OF BUSINESS

Daniel J. Borgia, Dean; Laura A. McEwen, Assistant Dean and Director, Graduate Business Programs; Sara Vescio, Executive Director of the Women's Business Center; Colleen Kowtun, Manager of Sales Operations of the Center for Professional Development

Bagen Hall 205 | 2001 Main Street | Buffalo NY 14208 | 716-888-2160 | Fax: 716-888-2145

Visit us on the Richard J. Wehle Business School webpage (<https://www.canisius.edu/academics/our-schools/richard-j-wehle-school-business>).

MISSION STATEMENT

The Richard J. Wehle School of Business (WSB) develops business professionals to lead within their organizations, to excel in a globally competitive marketplace, and to behave as ethically and socially responsible individuals. This is achieved through teaching excellence, intellectual vigor and community involvement in the Jesuit Tradition.

The Wehle School of Business prepares its graduates to:

- Lead within their organizations: Students from our undergraduate and master's programs will be prepared to successfully work with and motivate colleagues to accomplish organizational goals.
- Excel in the globally competitive marketplace: Leveraging our location on an international border, students will demonstrate knowledge of the globally competitive marketplace.
- Ethically and socially responsible individuals: Students will demonstrate ethically and socially responsible thinking and behavior and use their gifts in the service of others
- Teaching excellence: Maintain an environment of active and experiential student learning and intellectual growth using qualified and caring faculty.
- Intellectual vigor: Produce innovative and impactful faculty scholarship that advances knowledge related to pedagogy and professional practice.
- Community involvement: Encourage and support faculty and student activities that provide community service to and play an active role in our regional environment and targeted international communities.
- Jesuit academic experience: Use transformative learning rooted in the Catholic intellectual tradition to engage students in the classroom and community, caring for their spiritual, intellectual, emotional and physical lives, in order to educate the whole person in the service of others.

AACSB ACCREDITATION

The Richard J. Wehle School of Business is accredited by the Association to Advance Collegiate Schools of Business International (<http://www.aacsb.edu>) (AACSB). Accreditation by AACSB is the hallmark of excellence in management education, and has been earned by less than five percent of the world's business programs. Today, there are 761 business schools in 52 countries and territories that maintain AACSB Accreditation. It represents the highest standard of achievement for business schools worldwide. Programs receiving AACSB International accreditation have superior faculty, high-caliber teaching, and meaningful interaction between students and faculty. All students majoring in business are required to participate in assessment exercises appropriate for meeting accreditation requirements.

ACADEMIC PROGRAMS & DEPARTMENTS

The Richard J. Wehle School of Business offers curricula leading to premium undergraduate degree programs. You can view a complete listing of the undergraduate business and dual-degree programs by clicking on the Programs tab at the top of this page. Students can earn dual majors using two or more business majors or a combination of business and non-business majors from outside the Wehle School of Business.

ACADEMIC DEPARTMENTS

Accounting

Contact: Dr. Ian Redpath, Chair and Professor Accounting
Office: CT-407 | Phone: 716-888-2868 | Fax: 716-888-2870 | redpathi@canisius.edu

Economics & Finance

Contact: Dr. Mark Zaporowski, Chair and Professor of Economics and Finance
Office: OM-003 | Phone: 716-888-2670 | Fax: 716-888-3132 | zaporowm@canisius.edu

Management

Contact: Dr. Lynn Fish, Chair and Professor of Management
Office: CT-512 | Phone: 716-888-2642 | Fax: 716-888-3215 | fishl@canisius.edu

Marketing & Information Systems

Contact: Dr. Edward Garrity, Chair and Professor of Marketing & Information Systems
Office: CT-501 | Phone: 716-888-2215 | Fax: 716-888-3215 | garrity@canisius.edu

BETA GAMMA SIGMA

The Wehle School of Business at Canisius College houses a chapter of Beta Gamma Sigma (<https://www.betagammastigma.org>). Beta Gamma Sigma is the premier honor society recognizing business excellence. Lifetime members of the Society have earned the right to be considered the "Best in Business." Juniors ranking in the top seven percent of their class, seniors in the upper 10 percent, and graduate students who graduate in the top 20 percent are eligible for membership.

PROFESSIONAL STUDENT ORGANIZATIONS

The WSB sponsors a number of professional student organizations that provide a range of professional development opportunities for students preparing for careers in business. These organizations host workshops, seminars, networking events and tours of local businesses. Many of the student groups engage in community-based projects, using their business skills to help others and create a positive impact on the local economy. Some of the groups participate in competitions with other colleges from across the country. These competitions give students an opportunity to develop their skills and gain national recognition. The professional student organizations in the Wehle School of Business have been recognized by a number of external industry groups for their exceptional programming, leadership and success in competitions. Students are encouraged to become active in a professional student group early in their college career. Current student groups include:

- The Golden Griffin Fund
- The American Marketing Association (AMA)
- The Collegiate Entrepreneurs' Organization (CEO)
- Enactus
- The Accounting Society
- The Society for Human Resource Management (SHRM)
- The Association for Operations Management (APICS)
- Quad Gear
- The Economics/Finance Club

EXTERNAL BUSINESS PROGRAMS

Center for Professional Development

The WSB houses the Center for Professional Development (CPD), which delivers executive education and lifelong learning opportunities for individuals and businesses throughout the Western New York region and beyond. The CPD's diverse program options provide individuals with opportunity to advance their career, regardless of role or experience. Led by distinguished Faculty at Canisius College as well as by Western New York business experts, the CPD's programs are targeted at enhancing the skills leaders require to be successful in today's business climate. Located on the Main St. campus of Canisius College in Science Hall, many of the non-credit bearing seminars, professional development workshops, training and other programs offered by the CPD are open to enrollment by students, alumni and members of the community.

For additional information, contact:

Center for Professional Development (CPD)

Contact: Colleen Kowtun, Manager of Sales Operations of the Center for Professional Development

Science Hall | 2001 Main Street | Buffalo NY 14208 | 716-888-8280 | cpdinfo@canisius.edu

For a listing of CPD programs and upcoming events, visit the official CPD website (<http://canisiuscpd.com>).

The Women's Business Center

Located in Demerly Hall, just a short distance from the Main St. campus, the Women's Business Center (WBC) empowers entrepreneurs to succeed through education, connections and community by developing leaders, fostering opportunities and building collaboration. The WBC was established by the Richard J. Wehle School of Business in 2003 to support the success of entrepreneurs and small business owners with a focus on women in Erie County and the surrounding region including Buffalo, Rochester, Jamestown and Niagara Falls. The WBC provides services in small business development: training, counseling, coaching, and networking. Networking serves as a major component of all programs to ensure that every participant has made appropriate connections with business and community resources. Faculty and students at Canisius frequently connect with area entrepreneurs and small businesses through programs offered by the Women's Business Center. These connections often result in mutually beneficial relationships that contribute to the economic strength of the local and regional economy. The WBC is directed by Sara Vescio.

FOR ADDITIONAL INFORMATION, CONTACT:

Women's Business Center (WBC)

Contact: Sara L. Vescio, Executive Director

Demerly Hall | 2365 Main Street | Buffalo NY 14214-2326 | 716-888-8280 | wbcinfo@canisius.edu

For a listing of WBC programs and upcoming events, visit the official WBC website (<http://thewomensbusinesscenter.com>).

COMMITMENT TO BUSINESS ETHICS AND THE COMMUNITY

The Richard J. Wehle School of Business has always promoted ethics and the application of Jesuit values to the personal and professional lives of students, alumni, faculty and other members of our campus community. We believe that ethical behavior is a fundamental requirement for long-term success in business for both individuals and organizations. Our commitment to the promotion of ethics and ethical business behavior runs deep and can be seen in the School's mission statement, our curriculum, and the actions of our students and faculty as they engage with, and serve others in our local, regional and international community. In addition to teaching and promoting ethics in our academic programs, the Wehle School of Business is a founding partner in the Buffalo Niagara Business Ethics Association (BNBEA) (<http://buffalobusinessethics.org>). The BNBEA was established over a decade ago to honor companies that demonstrate a firm commitment to ethical business practices in daily operations, management philosophies, and responses to crises or challenges. Each year since 2007, the organization has honored small, medium and large businesses that have distinguished themselves by virtue of their ethical principles and behavior. Companies recognized by the BNBEA receive the organization's Crystal Award at an annual ceremony held in the spring. Three of the seven members of the BNBEA Board of Directors are affiliated with the Wehle School of Business and students from the One-Year MBA program play a critical role in judging the applications of companies nominated for the Crystal Award.

UNDERGRADUATE MAJORS & DEPARTMENTS

Majors	Department
Accounting (120 Hr.) & Professional Accounting (150 Hr.)	Accounting
Accounting Information Systems	Accounting
Economics	Economics/Finance
Entrepreneurship	Management
Finance	Economics/Finance
International Business	Management
Management	Management
Marketing	Marketing & Information Systems

In addition, dual majors are available in these areas or in combination with other majors outside the Wehle School of Business.

UNDERGRADUATE MINORS & DEPARTMENTS

Minors	Department
Business Management Minor (for majors outside the Wehle School of Business)	Management
Economics Minor	Economics & Finance
Global Logistics and Supply Chain Management Minor	Management
The Human Resources Management Minor	Management

Operations Management Minor	Management
Information Systems Minor	Marketing & Information Systems
International Business Minor	Management

The Wehle School of Business also offers graduate programs that lead to the degrees of Master of Business Administration (MBA), Master of Business Administration – Accounting (MBAA), Master of Business Administration in Professional Accounting (MBAPA), and Master of Science in Forensic Accounting (MSF). These degrees are described in the Graduate Catalog (<http://catalog.canisius.edu/graduate/wehle-school-business>).

The Wehle School of Business offers a 150-hour accounting program leading to undergraduate (BS –Accounting) and graduate (MBAA) degrees in accounting. Another dual degree program is open to students in any undergraduate major leading to an MBA degree. The 150 hour accounting programs are designed to provide students with the opportunity to sit for the CPA exam in New York after four years. 150 hours is required to obtain the CPA license in New York and in most other states.

BS/BA AND MBA DUAL DEGREE PROGRAM

Contact: Laura McEwen, Assistant Dean of Wehle School of Business and Director of the Wehle School of Business MBA Program
 Bagen Hall 205B | 2001 Main Street | Buffalo NY 14208 | 716-888-8280 | mcewenl@canisius.edu

For additional information, visit the Dual Degree webpage (<http://www.canisius.edu/economics-finance/overview/babs-mba-dual-degree>).

PROGRAM DESCRIPTION

This program enables qualified students in most majors to earn an undergraduate degree and a Master in Business Administration (MBA) within a five-year period. During the first three years, students take courses to fulfill their core curriculum and major-area requirements, saving electives for their senior year. In their senior year, students complete their undergraduate requirements and use free electives to take a series of introductory graduate courses. They complete the MBA requirements in the fifth year. Students with AP credits or transfer credits may be able to complete the program in less than five years.

Students may have to take more than the normal 15 credit hours per semester in the fourth year in order to satisfy the requirements of their undergraduate major and complete the MBA program by the summer of their fifth year. This will depend upon the number of credit hours remaining in their undergraduate program at the beginning of the fourth year. Waivers for MBA classes are based on equivalent courses taken at Canisius College. MBA courses in economics, statistics and accounting may be waived for students who achieve a grade of B or higher in ECO 101 - ECO 102, ECO 255 - ECO 256, and ACC 201 - ACC 202 (or ACC 211 - ACC 212) respectively. MBA courses in organizational behavior, marketing, operations management and finance may be waived for students in those majors. See Dean McEwen for further information on waivers.

BS/BA DUAL DEGREE ADMISSION

Application is made by students in the spring semester of their junior year. The Graduate Management Admission Test (GMAT) is required. Admission to the program will require meeting current MBA admission standards. Since individual programs of study are custom designed, interested students should meet with Dean McEwen as early as possible in their academic careers. The graduate section of the program is designed specifically for each student on the basis of his/her undergraduate experience and will

vary from student to student. Hence, early and continuous advisement is important. Students in majors with relatively few free electives, e.g. business, science or education, are especially encouraged to consult with Dean McEwen early in their academic careers to ensure timely completion of required courses. For further information, contact Laura McEwen, Assistant Dean of the Wehle School of Business and Director of the MBA Program.

Business Core

All business majors at Canisius College take a common set of courses designed to provide students with a breadth of business knowledge and skills. Upon completion of the business core, students should understand and appreciate the importance of several functional business areas and how these areas contribute collectively to the performance of organizations. In today's business environment, managers are frequently expected to work in cross-functional teams, understand how their specialty contributes to the overall mission and strategy of the organization and eventually advance to positions of leadership that require an understanding and appreciation for multiple divisions within an organization. As you will see in the table below, the common set of business courses known as the Business Core provides a strong, multi-faceted foundation that prepares students to become leaders in their organizations and excel in the globally competitive marketplace.

Select one of the following options for satisfying the mathematics requirement: ¹ 4-6

Option 1: A two course sequence of math courses:		
MAT 105	Finite Mathematics	
MAT 106	Calculus for the Non-Sciences	
Option 2: Select one of the following advanced math courses:		
MAT 109	Calculus with Review I	
MAT 111	Calculus I	
MAT 115	Calculus for Business	
Business Courses		
ISB 101	Management Technology	3
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
MGT 101	Introduction to Management	3
ACC 201	Financial Accounting ²	3
ACC 202	Managerial Accounting ²	3
MKT 201	Principles of Marketing	3
FIN 201	Introduction to Finance	3
ECO 255	Business Statistics I	3
ECO 256	Business Statistics II	3
MGT 325	Operations Analysis for Business ³	3
MGT 370	Managerial Environment ⁴	3
MGT 446	Managerial Policy/Strategy	3
Business International Requirement (See Description Below) ⁵		6
Total Credits		49-51

¹ For economics, business economics, finance and accounting students, MAT 115 is recommended over other options. However, students who are not well prepared in mathematics may wish to take MAT105 and MAT106 before moving on to more advanced math courses. Additional mathematics courses are recommended if the student is preparing for a graduate program in economics or finance. The student should consult a departmental advisor.

² Accounting Majors take ACC 211 and ACC 212 instead of ACC 201 and ACC 202

³ Management Majors take MGT 335 and MGT 336 instead of MGT 325

⁴ Accounting Majors take LAW 371 and LAW 372 instead of MGT 370

⁵ International business majors will satisfy the Business International Requirement by taking two semesters of a foreign language instead of non-U.S. culture courses since that major has a foreign language requirement. Other business majors may elect to fulfill the Business International Requirement with a non-U.S. culture course from History so at least one of the courses may also satisfy a College Core Curriculum requirement, such as a Field 4 (History) course.

Students are strongly encouraged to discuss options for completing this requirement with their advisor.

BUSINESS INTERNATIONAL REQUIREMENT

The Business International Requirement is part of the business core curriculum and is designed to help prepare students for doing business in an increasingly global economy. All business majors must complete a two course sequence of classes that emphasize either a modern language or a non-U.S. culture. If students elect to satisfy the requirement by taking language courses, the courses must be in the same modern language. Note that American Sign Language and classical or ancient languages such as Greek and Latin do not satisfy the Business International Requirement. The list of non-U.S. culture classes that satisfy the requirement is updated regularly and can be obtained from your advisor or department chair. Both classes must be related to the same culture (e.g. two courses about Asian history, two courses about European culture, two Latin American or Hispanic courses, etc.) As an alternative to modern language or non-U.S. culture classes, students can satisfy the Business International Requirement by participating in a semester long study abroad program.

Business Minor

The Business Minor is available to provide an introduction to business for non-business students who may want to seek employment in business after graduation. It consists of six required courses and one elective selected from several advanced business courses. For additional information, please see Laura McEwen, assistant dean of business.

ACC 201	Financial Accounting	3
ECO 101	Principles of Macroeconomics	3
ECO 255	Business Statistics I	3
FIN 201	Introduction to Finance	3
MGT 101	Introduction to Management	3
MKT 201	Principles of Marketing	3
Select one of the following business electives:		3
ECO 102	Principles of Microeconomics	
ECO 256	Business Statistics II	
FIN 311	Corporate Finance	
MGT 325	Operations Analysis for Business	
MGT 360	Organizational Behavior	
MGT 364	Human Resources Management	
MGT 370	Managerial Environment	
MKT 320	Consumer Behavior	
MKT 375	International Marketing	

Accounting Programs

120 Hour and 150 Hour Accounting Programs & Accounting Information Systems Program

Chair: Ian J. Redpath, JD, LL.M

INTRODUCTION

The Department of Accounting seeks to prepare graduates with the skills that are necessary for success in the profession of accounting. Accounting professionals are expected to be competent in accounting skills, well rounded in the various disciplines of business and possess excellent communication and interpersonal skills. Students with degrees in accounting find positions in public accounting, the financial sector, government and nonprofit entities, and other areas of business.

The accounting curriculum is registered with the New York State Education Department and the 150 hour accounting programs meet the education requirements of the state of New York for CPA licensure. To become a licensed CPA, an accounting graduate should also meet the experience requirement of the state of New York. Students desiring to sit for the exam and obtain their CPA license in other states should check with those states for their specific requirements. Academic options for CPA licensure specific to each variation in the Accounting degree program can be found in the pages that can be accessed by clicking the Majors tab at the top of this page.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to Accounting Programs webpage (<https://www.canisius.edu/academics/programs/accounting>).

REQUIREMENTS FOR GRADUATION

To qualify for graduation with any of the undergraduate Accounting degrees, a candidate must complete all the graduation requirements outlined in this catalog and must have a cumulative grade average of 2.0 in all Accounting courses taken at Canisius College as well as an overall GPA of at least 2.0. Students pursuing an MBA in Accounting or a Master of Forensic Accounting degree as part of a combined undergraduate/graduate (150 Hr.) degree program must also achieve a cumulative GPA of 3.0 (scale of 4.0) in their graduate studies.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

RETAKING COURSES

Students who are dissatisfied with their grade in a course, did not meet the minimum grade requirement for upper level accounting courses, or withdrew may repeat the course once (exceptions may be approved by the assistant dean of business in consultation with the department chair). In such cases both grades will be entered in the student's record, but, for the

purpose of computing grade point average, only the second grade will be used for the calculation. Because retaking courses that have already been passed (any grade of D or above) affects a student's financial aid, students should consult with the financial aid office before retaking any courses.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Note: Many accounting majors choose to dual major by combining an Accounting degree with a degree in Accounting Information Systems. Please consult your advisor for more detailed information.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

Note: While students are encouraged to begin meeting with an academic advisor early in their college career to consider various degree options, they generally do not have to make a decision about which accounting program to pursue until their junior year. For additional information regarding the MBA in Accounting (<http://catalog.canisius.edu/graduate/wehle-school-business/mba-professional-accounting>) and Master of Science in Forensic Accounting (<http://catalog.canisius.edu/graduate/wehle-school-business/ms-forensic-accounting>) refer to the Graduate Catalog or meet with an advisor. Programs are subject to change to meet State standards.

- Accounting (p. 239) - A 120 credit hour degree that provides options for students that want to earn a Certified Public Accountant (CPA) license as well as for those students who do not intend to pursue CPA licensure.
- Professional Accounting (p. 240) - A 150 credit hour degree that prepares students to sit for the Certified Public Accountant (CPA) license exam.
- Accounting and MBA in Accounting (MBAA) (p. 242) - A 150 credit hour degree that prepares students to sit for the Certified Public Accountant (CPA) license exam as well as earn both undergraduate (B.S.) and graduate (M.B.A.) degrees in Accounting.
- Accounting Information Systems (p. 244) - A 120 credit hour degree program for students interested in careers that require accounting skills and advanced technology skills. Many accounting majors elect to add this degree as a dual major option to enhance their career options following graduation.

ACCOUNTING

ACC 201 Financial Accounting 3 Credits

For Non-Accounting Majors. Introduction to accounting concepts for external financial reporting. Accounting theories and principles relative to asset and liability valuations, and income determination.

Offered: fall & spring.

ACC 202 Managerial Accounting 3 Credits

For Non-Accounting Majors. Introduction to accounting concepts for internal reporting and control. Cash budgeting, decision making, breakeven analysis, and performance evaluation.

Prerequisite: ACC 201.

Offered: fall & spring.

ACC 210 Accounting Procedures Seminar 0 Credits

In-depth review of basic accounting procedures underlying the preparation of financial statements. Coverage of accounting cycle with emphasis on adjusting entries and error analysis. Required for students who have not taken ACC 211 at Canisius.

Corequisite: ACC 301.

ACC 211 Principles of Accounting I 3 Credits

For Accounting Majors. Fundamental concepts and procedures of financial accounting with emphasis on asset and liability valuations and income determination.

Offered: fall & spring.

ACC 212 Principles of Accounting II 3 Credits

For Accounting Majors. Fundamental concepts and procedures of financial and managerial accounting with emphasis on asset funding, including debt and equity and cash flows. Accounting applications of present value concepts, introduction to budgeting and product costing. During the Spring semester the course has a mandatory 3 hour non-credit recitation section for professional development. The objective is to guide students as they develop the communication and leadership skills valued by the accounting profession.

Prerequisite: minimum grade of C in ACC 211; or minimum grade of B+ in ACC 201 & permission of the department chair (this is by discretion of the chair and is only granted on a case by case basis).

ACC 301 Intermediate Accounting I 3 Credits

First of a two-course sequence. In-depth accounting concepts and theories pertaining to external financial reporting. Emphasis on theories surrounding asset valuations, liability and equity measurements, income determination and cash flows.

Prerequisite: minimum grade of C in both ACC 211 & ACC 212, junior standing, & overall GPA of 2.0. students who took ACC 201 or transfer students with minimum grade of B+ and permission of the department chair may enroll in ACC 301 only if they concurrently enroll in ACC 210 (this is within the discretion of the chair and is only granted on a case by case basis).

Offered: fall & spring.

ACC 302 Intermediate Accounting II 3 Credits

Second of a two-course sequence. In-depth accounting concepts and theories pertaining to external financial reporting. Emphasis on theories surrounding asset valuations, liability and equity measurements, income determination and cash flows.

Prerequisite: minimum grade of C in both ACC 211 & ACC 212, junior standing, an overall GPA of 2.0.

Offered: spring.

- ACC 303 Cost Accounting** 3 Credits
Preparation and analysis of data utilized by management in planning and control decisions. Inventory valuation and reporting methods. Establishment and use of standards and budgets. The department offers ACC 303PD sections. These sections have a mandatory professional development lab attached to them. Their objective is to guide students as they develop the communication and leadership skills valued by the accounting profession. The course has a mandatory 3 hour non-credit recitation section.
Prerequisite: ACC 211, ACC 212, junior standing, & an overall GPA of 2.0.
Offered: fall & spring.
- ACC 307 Accounting Information Systems** 3 Credits
Development, organization, and implementation of accounting and management information systems. Emphasis on enterprise risk management, systems controls, processing cycles, and systems development life cycle.
Prerequisite: ACC 211 & ISB 101.
Offered: fall & spring.
- ACC 331 E-Business** 3 Credits
Challenges, opportunities and strategies in electronic mediated business such as systems development, cyber security and business intelligence including data analytics and visualization.
Prerequisite: ACC 307 (may register concurrently).
Offered: spring.
- ACC 415 Basic Taxation** 3 Credits
Provisions of Internal revenue Code relating to the determination of income, exclusions, deductions and credits. Emphasis is on the individual and sole proprietors. The course includes learning basic tax research and communication skills.
Prerequisite: minimum grade of C in both ACC 211 & ACC 212.
Offered: fall.
- ACC 416 Advanced Taxation** 3 Credits
Internal Revenue Code provisions relating to taxation of corporations, shareholders; partnerships, partners, estates, trusts and multistate taxation.
Prerequisite: minimum grade of C in ACC 415.
Offered: spring.
- ACC 421 Advanced Accounting Problems** 3 Credits
Accounting for corporate mergers and acquisitions, state and local government, non-profit institutions and foreign exchange transactions.
Prerequisite: minimum grade of C in ACC 302.
Offered: fall.
- ACC 425 Auditing Theory and Practice** 3 Credits
Generally accepted auditing standards and practice relevant to verification of historical financial statements; responsibilities and ethics pertinent to the public accounting profession; internal control evaluation; applying auditing programs; development of working paper documentation; the application of statistical sampling to gather audit evidence; the determination of the appropriate audit report for a given audit situation.
Prerequisite: minimum grade of C in ACC 302.
Offered: spring.
- ACC 426 Information Systems Auditing** 3 Credits
Information system control design and auditing in the internet, electronic and paperless environment; management of security technology; operating and application system processing controls; prevention of unauthorized activity.
Prerequisite: minimum grade of C in each of ACC 307 & one of the following: ACC 331, ACC 452, or ACC 425.
Offered: fall.
- ACC 429 Governmental and Not for Profit Accounting** 3 Credits
Accounting and reporting issues that apply to governmental units, hospitals, schools, religious institutions and other non-profit organizations; budgetary procedures including appropriations and encumbrances.
Offered: spring.
- ACC 441 Fraud Examination: Detection and Deterrence** 3 Credits
The course will concentrate on financial fraud, white-collar crime, how financial fraud is perpetrated, approaches to fraud investigations and documentation, and fraud detection and prevention. Ethical issues in fraud examination and investigation will be covered as well as strategies and tools for fraud deterrence in organizations.
Prerequisite: minimum grade of C in each of ACC 301, ACC 302, & either ACC 425 or ACC 426.
Offered: fall.
- ACC 451 Accounting Theory and Research** 3 Credits
Standard setting procedures at the U.S. and international levels, accounting concepts and principles, contemporary accounting issues, concepts of income determination, database/library research to support or oppose accounting positions.
Prerequisite: minimum grade of C in ACC 302.
Offered: fall.
- ACC 452 Enterprise Systems** 3 Credits
Evaluating enterprise information, enterprise resource planning (ERP) system design and functionality, data integrity, use of financial and non-financial information for organizational decision-making, business process improvement and risk management.
Prerequisite: minimum grade of C in ACC 307.
Offered: spring.
- ACC 496 Internship** 1-3 Credits
Internships require an application and approval by the associate dean.
Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.
- ACC 499 Independent Research in Accounting** 3 Credits
Undertaking of a significant piece of independent research. By appointment with chairperson. Independent studies require an application and approval by the associate dean.
Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.
Offered: fall & spring.

BUSINESS LAW

- LAW 371 Business and Commercial Law** 3 Credits
American legal system and substantive law relating to business. This course focuses on the Constitution, Torts, Criminal, Cyber, Intellectual Property, Contracts, UCC Sales, International law and ethics and accountants professional responsibility.
Offered: fall.
- LAW 372 Business Organizations and Commercial Paper** 3 Credits
The American Legal System and substantive law relating to business focusing on the law relating to: negotiable instruments, banking, debtor creditor relationships, bankruptcy, secured transactions, agency, partnerships and LLCs, securities regulation, employment, environmental, anti-trust, property and wills and trusts.
Prerequisite: minimum grade of C in LAW 371.
Offered: spring.

Accounting - 120 Hr.

Chair: Ian J. Redpath, JD, LL.M.

INTRODUCTION

The Department of Accounting seeks to prepare graduates with the skills that are necessary for success in the profession of accounting. Accounting professionals are expected to be competent in accounting skills, well rounded in the various disciplines of business and possess excellent communication and interpersonal skills. Students completing the accounting program find positions in public accounting, industry, the financial sector, government and nonprofit entities.

The accounting curriculum is registered with the New York State Education Department. To become a licensed CPA, an accounting graduate should also meet the experience requirement of the state of New York. Students desiring to sit for the exam and obtain their CPA license in other states should check with those states for their specific requirements. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to Accounting Program webpage (<https://www.canisius.edu/academics/programs/accounting>).

Note: Please see the Accounting Programs Overview (p. 236) page in this catalog for important information about degree policies and courses.

BECOMING A LICENSED CERTIFIED PUBLIC ACCOUNTANT (C.P.A.)

There are two basic tracks for completing the 120 Hr. Accounting Program: 1) The C.P.A. track and, 2) The Non-C.P.A. track. Students who wish to qualify to take the C.P.A. exam must use their accounting elective courses and a free elective course to take a set of classes that cover important topics related to public accounting (see courses listed on the Curriculum tab for this program). Students who do not wish to take the C.P.A. exam can select other classes when choosing how they will satisfy their accounting and free electives course requirements. In addition to passing the C.P.A. exam, 120 Hr. accounting majors must also meet additional New York State requirements to become licensed. Accounting students in the 120 Hr. Program are strongly encouraged to discuss these two options (CPA Track & Non-CPA Track) and New York State CPA licensing requirements with their adviser.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Course Requirements: In addition to the common liberal arts and business courses, students in this program will take:

Business Core	
Required courses for all business majors (p. 235)	49-51
Additional Major Requirements	

ACC 301 & ACC 302	Intermediate Accounting I and Intermediate Accounting II	6
ACC 303	Cost Accounting	3
ACC 307	Accounting Information Systems	3
ACC 415	Basic Taxation	3
LAW 371	Business and Commercial Law	3
LAW 372	Business Organizations and Commercial Paper	3
ENG 389	Business Communication	3
Accounting Electives		6
Total Credits		79-81

COURSES REQUIRED TO TAKE THE CPA EXAM

Students in the 120 credit hour Accounting program who wish to be qualified to take the CPA exam must use their Accounting and Free Elective courses to take the following:

ACC 416	Advanced Taxation	3
ACC 421	Advanced Accounting Problems	3
ACC 425	Auditing Theory and Practice	3

TYPICAL SCHEDULE

120 Hours – BS in Business Administration (Major: Accounting)

First Year	
Fall	Spring
FYS 101	ENG 101
MAT 105 (or MAT 109, MAT 111 or MAT 115)	MAT 106 (or Free Elective if MAT 109, MAT 111 or MAT 115 in fall)
ECO 101	ECO 102
RST 101	PHI 101
Business International Requirement I	Business International Requirement II
Sophomore	
Fall	Spring
MGT 101	MKT 201
ACC 211	ACC 212
ECO 255	ECO 256
ISB 101	ACC 307
Field of Knowledge 4 (History)	Field of Knowledge 3 (Arts)
Junior	
Fall	Spring
ACC 301	ACC 302
ACC 303	ENG 389
FIN 201	Arts & Science Elective
Field of Knowledge 6 (Natural Science)	Field of Knowledge 2 (Philosophy)
Field of Knowledge 1 (Religious Studies)	College Core Capstone
Senior	
Fall	Spring
ACC 415	Accounting Elective (400 Level) ¹
Accounting Elective (400 Level) ¹	MGT 325
LAW 371	LAW 372
Arts & Science Elective	MGT 446

Arts & Science Elective

Free Elective¹

¹ Students who wish to be qualified to take the CPA exam must use their ACC Electives and Free Electives to take the following 3 courses:

- ACC 416 Advanced Tax
- ACC 421 Advanced Financial Reporting
- ACC 425 Auditing

LEARNING GOAL 1

Students will apply current principles of accounting to the measurement and reporting of accounting information.

Students will:

Objective A: Construct the financial statements in accordance with generally accepted accounting principles and analyze the strengths and weaknesses of each statement;

Objective B: Evaluate the reporting and valuation of assets and liabilities in accordance with generally accepted accounting principles;

Objective C: Evaluate the various alternatives to the measurement of income and the determination of financial position.

LEARNING GOAL 2

Graduates will know how to compare/contrast alternative business decisions, and evaluate the potential impact of these decisions on future financial performance.

Students will:

Objective A: Demonstrate a sound understanding of cost behavior and analyze the differences resulting from fixed and variable costs in financial performance;

Objective B: Analyze the differences that result in financial reporting from the company's choice of inventory costing techniques;

Objective C: Apply budgeting techniques in the preparation of static and flexible budgets.

LEARNING GOAL 3

Graduates will know the characteristics of internal control procedures needed in the aggregation of accounting information.

Students will:

Objective A: Demonstrate an understanding of the purpose of internal controls;

Objective B: Demonstrate an understanding of the principles of controls;

Objective C: Analyze the relationship of technology and controls.

LEARNING GOAL 4

Graduates will know how the external regulatory, legal, and ethical environments impact business decisions and financial reporting requirements.

Students will:

Objective A: Apply different ethical frameworks in making business decisions;

Objective B: Apply both societal and governmental laws/regulations in making business decisions;

Objective C: Apply Federal Tax Law and regulation in the determination of taxable liability.

Professional Accounting

Chair: Ian J. Redpath, JD, LL.M

INTRODUCTION

To become a licensed Certified Public Accountant (C.P.A.), all states require students to complete 150 credit hours of instruction at an accredited college or university. In the state of New York, students can take the C.P.A. exam after only completing 120 credit hours of instruction, but before receiving a C.P.A. license, individuals must complete an additional 30 credit hours of instruction as well as complete one year of full-time work experience in the accounting field. Because a traditional Bachelor's degree program in New York usually requires 120 credit hours of course work, colleges and universities have developed alternative ways for accounting students to meet the 150 credit hour standard required for professionals who wish to become licensed Certified Public Accountants.

One option available at Canisius College is for students to complete an undergraduate program consisting of 150 credit hours of instruction leading to a Bachelor of Science Degree in Professional Accounting. This degree can be combined with a second major or taken as a stand-alone degree. This program usually takes 5 years to complete, but with proper planning can be completed in 4 1/2 years. AP credits may also reduce completion time. This program is registered with the State of New York and qualifies a graduate to take the C.P.A. examination and become fully licensed once all other New York State requirements have been met. In addition to the B.S. in Professional Accounting, 150 Hr. Program, Canisius offers other 150 Hr. programs that might provide additional benefits to qualified students.

Students are strongly encouraged to discuss their career goals and learn about C.P.A. licensing early in their college career by meeting with their academic adviser.

Note: Please see the Accounting Programs Overview (p. 236) page in this catalog for important information about degree policies and courses.

ADMISSION TO THE PROFESSIONAL ACCOUNTING (150 HR.) PROGRAM

Students do not need to seek special admission to the Professional Accounting Program, but they must declare their intent to pursue the major by completing a major declaration form with the Student Records Office, and by emailing their department Program Adviser and the assistant dean of the Richard J. Wehle School of Business.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Business Core

Required courses for all business majors (p. 235)

49-51

Additional Major Requirements

ACC 301 & ACC 302	Intermediate Accounting I and Intermediate Accounting II	6
ACC 303	Cost Accounting	3
ACC 307	Accounting Information Systems	3
ACC 415	Basic Taxation	3
ACC 416	Advanced Taxation	3
ACC 421	Advanced Accounting Problems	3
ACC 425	Auditing Theory and Practice	3
ACC 426	Information Systems Auditing	3
ACC 451	Accounting Theory and Research	3
LAW 371	Business and Commercial Law	3
LAW 372	Business Organizations and Commercial Paper	3
ENG 389	Business Communication	3
Accounting Elective		3
Business Elective		3
Total Credits		94-96

TYPICAL SCHEDULE

Professional Accounting (150 Hr.)

Freshman

Fall	Spring
FYS 101	ENG 101
Select one of the following:	PHI 101
MAT 105, MAT 109, MAT 111 or MAT 115	MAT 106 (or an A&S elective if MAT 109, MAT 111 or MAT 115 was taken in the fall.)
ECO 101	ECO 102
RST 101	Business International Requirement
Business International Requirement	

Sophomore

Fall	Spring
MGT 101	MKT 201
ACC 211	ACC 212
ECO 255	ACC 307
ISB 101	ECO 256
Field of Knowledge 4 - History	Field of Knowledge 3 - Arts

Junior

Fall	Spring
ACC 301	ACC 302
ACC 303	ENG 389
FIN 201	Field of Knowledge 2 - Philosophy ¹
LAW 371	LAW 372
Field of Knowledge 1 - Religion	Field of Knowledge 6 - Natural Science

Senior

Fall	Spring
MGT 325	ACC 416
ACC 415	ACC 425
ACC 421	MGT 446
ACC 451	A & S Elective
Core Capstone	A & S Elective

Fifth Year

Fall	Spring
ACC 426	Accounting Elective
Business Elective	A & S Elective
Free Elective	Free Elective
Free Elective	Free Elective
Free Elective	Free Elective

¹ Ethics Course

Learning Goal 1

Students will apply current principles of accounting to the measurement and reporting of accounting information.

Students will:

- Objective A: Construct the financial statements in accordance with generally accepted accounting principles and analyze the strengths and weaknesses of each statement;
- Objective B: Evaluate the reporting and valuation of assets and liabilities in accordance with generally accepted accounting principles;
- Objective C: Evaluate the various alternatives to the measurement of income and the determination of financial position;
- Objective D: Apply aspects of FASB's conceptual framework to transactions and compare/contrast the reporting impact of the concepts applied.

Learning Goal 2

Graduates will know how to compare/contrast alternative business decisions, and evaluate the potential impact of these decisions on future financial performance.

Students will:

- Objective A: Demonstrate a sound understanding of cost behavior and analyze the differences resulting from fixed and variable costs in financial performance;
- Objective B: Analyze the differences that result in financial reporting from the company's choice of inventory costing techniques;
- Objective C: Apply budgeting techniques in the preparation of static and flexible budgets;
- Objective D: Evaluate effectiveness of controls and the methods used to test controls.

Learning Goal 3

Graduates will know the characteristics of internal control procedures needed in the aggregation of accounting information.

Students will:

- Objective A: Demonstrate understanding of the purpose of internal controls;
- Objective B: Demonstrate understanding of principles of controls;
- Objective C: Analyze the relationship of technology and controls.

Learning Goal 4

Graduates will know how the external regulatory, legal, and ethical environments impact business decisions and financial reporting requirements.

Students will:

- Objective A: Apply different ethical frameworks in making business decisions;
- Objective B: Apply both societal and governmental laws/regulations in making business decisions;
- Objective C: Apply Federal Tax Law and regulation in the determination of taxable liability.

Accounting and MBA in Accounting (MBAA)

Candidates must be pursuing a Canisius BS in Accounting to be eligible for this program.

The Master Business Administration in Accounting (150 hour program) meets the NYS educational requirement for 150 hours for certification as a NYS CPA. Under present education requirements of the State of New York, students are eligible to sit for the NYS CPA examination upon completing their 120 hour program (BS in Accounting) with the completion of Auditing. Students must have 150 hours to secure the educational requirements for NYS CPA Licensure with the completion of Auditing.

Students will apply for the MBAA 150 hour program in the fall semester of their junior year. In their senior year, students will start taking classes at the MBA level. After graduating with a BS in Accounting, with a minimum QPA of 2.0 in all courses and the required 2.0 in accounting/business law courses, students will start the graduate portion of their program (MBAA). Students will be graduate students and pay student graduate tuition rates. Graduate tuition is charged per credit hour.

ADMISSION REQUIREMENTS

Students entering this program must have a bachelor's degree in accounting from Canisius College to start the graduate portion of their program (MBAA). This program meets the NYS educational requirement for 150 hours for certification as a NYS CPA.

Students should apply in the fall semester of their junior year. Applications can be secured in the Graduate Business Office and informational sessions will be held in the fall semester.

The MBAA Admissions Committee takes a holistic approach in evaluating an application for admission. The committee takes into consideration the undergraduate QPA and the scores on the Graduate Management Admission Test (GMAT). The Graduate Record Exam (GRE) will not be accepted. Following guidelines are suggested for those considering applying. The candidate should have (1) a minimum cumulative average of 2.75 in all accounting courses (2) a minimum cumulative GPA of 3.0 in all courses, (3) a score of at least 500 on the GMAT. With the completion of the GMAT, a decision will be made before the completion of the spring semester of a student's junior year for provisional admission. Upon completion of the spring semester of the junior year, students will be re-evaluated for regular admission based on the above criteria.

GMAT Waiver - Students are eligible for a GMAT waiver based on the following criteria:

1. GPA of 3.2 in all courses
2. GPA of 3.0 in all accounting courses including business law
3. A minimum grade of C in ACC 301 and ACC 302

Students who do not meet the criteria for acceptance into the MBAA 150 hour program are eligible for the 150 hour undergraduate program in Professional Accounting by completing all undergraduate courses.

REGISTRATION FOR COURSES IN THE MBAA

Upon acceptance, students will be contacted by the Graduate Business Office for registration for their first fall semester in the MBAA Program.

Students will still secure advising for registration for the spring semester of their senior year. Interested candidates will register for their required accounting courses and will be changed to the graduate sections at the time of acceptance. Graduate sections for the accounting courses meet at the same times as the undergraduate sections.

Students must take the following courses in their senior year:

Accounting requirements:

MBA 715 for ACC 415 (fall only)

MBA 716 for ACC 416 (spring only)

MBA 721 for ACC 421 (fall only)

MBA 725 for ACC 425 (fall only)

MBA 751 for ACC 451 (fall only)

Business requirements:

MBA 507 for MGT 325 (fall or spring)

MBA 690 for MGT 446 (fall or spring)

Please note, D grades are not awarded at the graduate level.

ACADEMIC STANDING

For the undergraduate portion of the MBAA 150 hour program students should review the probationary and dismissal policies in the undergraduate catalog for BS/BA candidates.

For the graduation portion of the program students can be

Students must have CGPA of 3.0 to graduate

A student is placed on academic probation if:

1. After completion of six hours of course work, the student's cumulative grade point average is 2.0 or lower,
2. Any time after completion of nine or more hours of course work, the cumulative grade point average is below a 3.0 or lower.

A student may be dismissed from the program if:

1. After completion of six hours of course work, subsequent to being placed on academic probation, the cumulative grade point average is less than 2.0,
2. After completion of at least 18 hours of course work, the cumulative grade point average is less than 3.0. A student may be dismissed without having been placed on probation first.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Required Courses

FYS 101	Explorations of Academic Writing and Special Topics	3
ENG 101	Writing about Literature	3
RST 101	Introduction to Religious Studies and Theology	3
PHI 101	Introduction to Philosophy	3
One course from each of Breadth of Knowledge (Fields 1 to 7)		21
College Core Capstone -senior year		3
One course from each of the six knowledge and skills attributes		

Common Body of Business Knowledge

Required courses for all business majors (p. 235)	45-48
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Accounting Courses at the Undergraduate Level

ACC 301	Intermediate Accounting I	3
ACC 302	Intermediate Accounting II	3
ACC 303	Cost Accounting	3
ACC 307	Accounting Information Systems	3
LAW 371	Business and Commercial Law	3
LAW 372	Business Organizations and Commercial Paper	3
ENG 389	Business Communication	3

Accounting courses taken in 4th year as graduate courses

MBA 507	Operations Planning and Control	3
MBA 690	Strategic Management and Leadership	3
MBA 715	Basic Taxation	3
MBA 716	Advanced Taxation	3
MBA 721	Advanced Financial Reporting	3
MBA 725	Auditing Theory and Practice	3
MBA 751	Seminar in Accounting Theory	3

Graduate Portion- courses taken in 5th year

MBA 502	Leadership in Organizational Behavior	3
MBA 508	Corporate Finance	3
MBA Finance Elective		3
MBA 630	Marketing Strategy	3
MBA 641	Human Resource Management	3
MBA 726	Advanced Auditing	3
MBA 729	Not-for-Profit Accounting	3
Two MBA Electives		6

Total Credits	150-153
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TYPICAL SCHEDULE

150-Hours Program, BS in Business Administration (Major: Accounting)/
MBA in Accounting (MBAA)

Freshman

Fall	Spring
FYS 101	ENG 101
Select one of the following: MAT 105, MAT 109, MAT 111 or MAT 115	Select one of the following: MAT 106 or A&S Elective if MAT 109, MAT 111, MAT 115 taken in fall.
ECO 101	ECO 102
RST 101	PHI 101
Business International Requirement	Business International Requirement

Sophomore

Fall	Spring
MGT 101	MKT 201
ACC 211	ACC 212
ECO 255 (Statistics I)	ECO 256 (Statistics II)
ISB 101	ACC 307
Field of Knowledge 4 - History	Field of Knowledge 3 - Arts

Junior

Fall	Spring
ACC 301	ACC 302
ACC 303	ENG 389
FIN 201	A&S Elective
LAW 371	Field of Knowledge 2 - Philosophy ¹
Field of Knowledge 1 - Religion	LAW 372
Field of Knowledge 6 - Science	

Senior

Fall	Spring
MBA 715	MBA 716
MBA 721	MBA 725
MBA 751	MBA 507
Core Capstone	MBA 690
A&S Elective	A&S Elective

Fifth Year

Fall	Spring
MBA Elective	MBA 620 or 621
MBA 726	MBA 641
MBA 502	MBA 729
MBA 508	MBA Elective
MBA 630	

¹ Ethics course

LEARNING GOAL 1

Graduates will know how financial information is measured and reported to external users.

Students will:

- Objective A: Calculate financial ratios and performance measures and analyze the results;
- Objective B: Apply current principles of accounting to the measurement and reporting of financial accounting information;
- Objective C: Apply taxation regulations in the measurement and reporting of information to governmental entities;
- Objective D: Explain the processes/principles related to providing assurance as to the integrity of the reporting process.

LEARNING GOAL 2

Graduates will know how companies evaluate internal controls for the aggregation of financial information, and compare/contrast the impact of alternative business decisions on future company performance.

Students will:

- Objective A: Explain the budgeting process and analyze business decisions related to the budgets prepared;

- Objective B: Apply concepts related to accounting system controls.

MBA COURSES TAKEN IN 4TH YEAR

MBA 507 Operations Planning and Control 3 Credits

Operations management involves the planning, coordinating and executing of all activities that create goods and services. The subject matter includes, but is not limited to, productivity, competitiveness, operations strategy, quality management, facility layout, new technologies, inventory management, just-in-time, demand and capacity planning within the firm.
Prerequisite: MBA 503.

Offered: fall, spring & summer.

MBA 690 Strategic Management and Leadership 3 Credits

Developing strategies for successful business operation and hands-on business analysis focusing on problem solving; student teams work with current business problems using analytical tools and skills developed from other courses.

MBA 715 Basic Taxation 3 Credits

Provisions of Internal revenue Code relating to the determination of income, exclusions, deductions and credits. Emphasis is on the individual and sole proprietors. The course includes learning basic tax research and communication skills.

MBA 716 Advanced Taxation 3 Credits

Internal Revenue Code provisions relating to taxation of corporations, shareholders; partnerships, partners, estates, trusts and multistate taxation.

MBA 721 Advanced Financial Reporting 3 Credits

Accounting for corporate mergers and acquisitions, state and local government, non-profit institutions and foreign exchange transactions.

MBA 725 Auditing Theory and Practice 3 Credits

Generally accepted auditing standards and practice relevant to verification of historical financial statements; responsibilities and ethics pertinent to the public accounting profession; internal control evaluation; applying auditing programs; development of working paper documentation; the application of statistical sampling to gather audit evidence; the determination of the appropriate audit report for a given audit situation.

MBA 726 Advanced Auditing 3 Credits

Information system control design and auditing in the internet, electronic and paperless environment; management of security technology; operating and application system processing controls; prevention of unauthorized activity.

MBA 751 Seminar in Accounting Theory 3 Credits

Standard setting procedures at the U.S. and international levels, accounting concepts and principles, contemporary accounting issues, concepts of income determination, database/library research to support or oppose accounting positions.

MBA COURSES TAKEN IN 5TH YEAR

MBA 502 Leadership in Organizational Behavior 3 Credits

This course is designed to enrich students' understanding of behavior in organizations. Course study draws on the behavioral and social sciences to explore organizational phenomena in terms of individuals, groups and total organizational systems. The course stresses the role leadership plays in creating effective organizations, meeting employee needs, managing power relationships and revealing meaning in contemporary organizations.

MBA 508 Corporate Finance 3 Credits

This course provides an introduction to the basic tools of financial management. Topics covered include the goal of financial management, analysis of financial statements, the concept of cash flow, financial planning, time value of money, capital budgeting, the principles of stock and bond valuation, the risk/return tradeoff and capital markets theory, capital structure, cost of capital, dividend policy, working capital management and international aspects of finance.

MBA 630 Marketing Strategy 3 Credits

Through the use of case analysis and computer simulation games, students will develop skills in applying and evaluating strategic marketing decisions. This course builds on the MBA 506 Foundation of Marketing Strategy course in that students will be expected to have mastered material in that course and be able to apply it to a series of cases or simulations of a competitive market environment. Application of statistical and other computer-based analytical techniques also go beyond what is covered in the foundation course. Strategic decisions in the cases used will be taken from a combination of the following strategic decision areas of marketing, the choice of which areas depending on the expertise of the instructor delivering the course and the nature of the cases available: 1) Product and Service Decisions, 2) Pricing and Related Decisions, 3) Integrated Marketing Communications Decisions, and 4) Supply Chain Marketing Decisions. Organization and control factors essential to implementation of effective marketing strategy that would be used in this course include 1) Developing and implementing a marketing budget, 2) Sales forecasting approaches and techniques, 3) Financial Statement Analysis, 4) Compensation planning for sales and marketing personnel, and 5) Marketing controls and Marketing Information Systems.

MBA 641 Human Resource Management 3 Credits

This course examines the critical functions and roles of human resource management (HRM) in complex organizations. Topics include the legal implications of HRM, job analysis and design, HR planning, recruitment and selection, training and development, performance management, compensation and benefits, and employee and labor relations. Most significantly, the course looks at managing people and the employment relationship from a strategic perspective.

MBA 726 Advanced Auditing 3 Credits

Information system control design and auditing in the internet, electronic and paperless environment; management of security technology; operating and application system processing controls; prevention of unauthorized activity.

MBA 729 Not-for-Profit Accounting 3 Credits

Accounting and reporting issues that apply to governmental units, hospitals, schools, religious institutions and other non-profit organizations; budgetary procedures including appropriations and encumbrances.

*Students are required to complete one MBA Finance Elective and two MBA electives. MBA electives should be 600 level courses for a list of MBA elective available course descriptions please visit courses page in the MBA program.

Accounting Information Systems INTRODUCTION

Accounting Information Systems (B.S.)

Chair: Ian J. Redpath, JD, LL.M.

The Accounting Information Systems program is part of the Richard J. Wehle School of Business (<https://www.canisius.edu/academics/our-schools/richard-j-wehle-school-business>) and is accredited by the prestigious

Association to Advance Collegiate Schools of Business (AACSB). As a Jesuit institution, you will also take a strong core of courses that emphasizes writing skills, logic and breadth of knowledge about the human experience. The Jesuit tradition of developing both intellect and character translates into accounting professionals who concern themselves with not only the financial health of an organization but also its professional integrity and its contribution to society as a whole.

The Accounting Information Systems (AIS) Program is designed for students to gain the knowledge and skills required to bridge the gap between accounting and technology. AIS is a unique program, started in 2002, as one of only 30 schools offering similar programs in the U.S. AIS majors are often dual majors with accounting who join the AIS program after starting at Canisius while some students major only in AIS. The AIS major skills are in demand in the market place. Some AIS graduates choose careers in technical positions such as an Information Systems Auditor for high paying jobs with public accounting firms and financial institutions. These positions typically pay higher starting salaries than the entry level accounting positions. Other graduates use their AIS knowledge to supplement their accounting skills to enhance their performance in their professional careers and improve the chances of landing their first professional position.

From its inception, the AIS program has strived to reinforce concepts with state of the art technology that expands the career opportunities of our graduates. More recently, in the summer of 2013, Canisius College joined the SAP University Alliance (<http://scn.sap.com/community/uac>) which enables the college to use SAP software for instructional purposes. SAP is the worldwide leader in enterprise resource planning (ERP) software solutions. Students benefit from hands on use of SAP software throughout the AIS program. The SAP initiative was made possible through partnerships with local businesses.

Courses are taught by full-time faculty members who bring real-world knowledge to the classroom through their experiences as accounting and systems professionals. You will benefit from the department's close ties with business leaders who often provide internship opportunities, permanent jobs, and valuable advice. Additional information is available at the Accounting Information Systems website (<https://www.canisius.edu/academics/programs/accounting-information-systems>).

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Business Core

Required courses for all business majors (p. 235) 49-51

Additional Major Requirements

ACC 301	Intermediate Accounting I	3
ACC 303	Cost Accounting	3
ACC 307	Accounting Information Systems	3
ACC 331	E-Business	3

ISB 340	Database Management Systems	3
MGT 370	Managerial Environment ¹	3
ACC 426	Information Systems Auditing	3
ACC 452	Enterprise Systems	3
ENG 389	Business Communication	3
Total Credits		76-78

¹ Students may substitute LAW 371 or LAW 372 for MGT 370.

TYPICAL SCHEDULE

120 hours - BS in Business Administration (Major: Accounting Information Systems)

Freshman

Fall	Spring
FYS 101	ENG 101
Select one of the following: MAT 105, MAT 109, MAT111 or MAT115	PHI 101 MAT 106 (A&S Elective if MAT 109, MAT 111 or MAT 115 was taken in fall.)
ECO 101	ECO 102
RST 101	Business International Requirement
Business International Requirement	

Sophomore

Fall	Spring
MGT 101	MKT 201
ACC 211	ACC 212
ECO 255	ECO 256
ISB 101	ACC 307
Field of Knowledge 4 - History	Field of Knowledge 3 - Arts

Junior

Fall	Spring
ACC 301	ACC 331
ACC 303	ENG 389
FIN 201	A&S Elective
Field of Knowledge 1 - Religion	Field of Knowledge 2 - Philosophy ¹
Field of Knowledge 6 - Science	A&S Elective

Senior

Fall	Spring
ISB 340	ACC 452
ACC 426	MGT 446
MGT 325	Free Elective
MGT 370	Free Elective
Core Capstone	A&S Elective

¹ Ethics Required

ACC 211 Principles of Accounting I **3 Credits**
 For Accounting Majors. Fundamental concepts and procedures of financial accounting with emphasis on asset and liability valuations and income determination.
Offered: fall & spring.

ACC 212 Principles of Accounting II 3 Credits

For Accounting Majors. Fundamental concepts and procedures of financial and managerial accounting with emphasis on asset funding, including debt and equity and cash flows. Accounting applications of present value concepts, introduction to budgeting and product costing. During the Spring semester the course has a mandatory 3 hour non-credit recitation section for professional development. The objective is to guide students as they develop the communication and leadership skills valued by the accounting profession.

Prerequisite: minimum grade of C in ACC 211; or minimum grade of B+ in ACC 201 & permission of the department chair (this is by discretion of the chair and is only granted on a case by case basis).

ACC 301 Intermediate Accounting I 3 Credits

First of a two-course sequence. In-depth accounting concepts and theories pertaining to external financial reporting. Emphasis on theories surrounding asset valuations, liability and equity measurements, income determination and cash flows.

Prerequisite: minimum grade of C in both ACC 211 & ACC 212, junior standing, & overall GPA of 2.0. students who took ACC 201 or transfer students with minimum grade of B+ and permission of the department chair may enroll in ACC 301 only if they concurrently enroll in ACC 210 (this is within the discretion of the chair and is only granted on a case by case basis).
Offered: fall & spring.

ACC 303 Cost Accounting 3 Credits

Preparation and analysis of data utilized by management in planning and control decisions. Inventory valuation and reporting methods. Establishment and use of standards and budgets. The department offers ACC 303PD sections. These sections have a mandatory professional development lab attached to them. Their objective is to guide students as they develop the communication and leadership skills valued by the accounting profession. The course has a mandatory 3 hour non-credit recitation section.

Prerequisite: ACC 211, ACC 212, junior standing, & an overall GPA of 2.0.
Offered: fall & spring.

ACC 307 Accounting Information Systems 3 Credits

Development, organization, and implementation of accounting and management information systems. Emphasis on enterprise risk management, systems controls, processing cycles, and systems development life cycle.

Prerequisite: ACC 211 & ISB 101.

Offered: fall & spring.

ACC 331 E-Business 3 Credits

Challenges, opportunities and strategies in electronic mediated business such as systems development, cyber security and business intelligence including data analytics and visualization.

Prerequisite: ACC 307 (may register concurrently).

Offered: spring.

ACC 426 Information Systems Auditing 3 Credits

Information system control design and auditing in the internet, electronic and paperless environment; management of security technology; operating and application system processing controls; prevention of unauthorized activity.

Prerequisite: minimum grade of C in each of ACC 307 & one of the following: ACC 331, ACC 452, or ACC 425.

Offered: fall.

ACC 452 Enterprise Systems 3 Credits

Evaluating enterprise information, enterprise resource planning (ERP) system design and functionality, data integrity, use of financial and non-financial information for organizational decision-making, business process improvement and risk management.

Prerequisite: minimum grade of C in ACC 307.

Offered: spring.

ISB 340 Database Management Systems 3 Credits

Design and application of database management systems. Topics include structured query language (SQL), data structures, querying and report writing, database design and administration, data mining and security.

Prerequisite: ISB 101 or equivalent.

Offered: every fall.

Economics Programs

There are three different ways that students can pursue degree in Economics at Canisius. Students can earn a Bachelor of Arts degree in Economics by completing a set of required Economics courses. Students who wish to pursue careers in business should consider earning a Bachelor of Science degree in Economics which combines required Economics courses with a collection of courses called The Business Core Curriculum (p. 235). The Business Core Curriculum is designed to provide students with a broad understanding of other areas of business, preparing them to take leadership roles in the organizations they work for. Finally, students earning degrees in other disciplines can get exposure to the field of Economics by earning a Minor degree. You can explore the details associated with each of these degree options by clicking the tabs at the top of this page.

For additional information about the Economics program, please visit the Economics Program webpage (<https://www.canisius.edu/academics/programs/economics>).

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a major degree in Economics. All students must complete a minimum of 120 credit hours to graduate.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

A dual major in Economics and Mathematics & Statistics (p. 175) is strongly recommended for the student who is interested in graduate school in either finance or economics. Up to two mathematics courses beyond MAT 111 may be used as economics electives.

Dual majors in Economics (BS) and Finance (p. 254) are required to take six electives in total. Two must be Economics electives and four must be Finance electives.

MAJOR EXPERIENCES

The department encourages internship experiences as part of the major and accepts one internship on a pass/fail basis as an Economics elective. Many of our majors have participated in the All-College Honors program and have written honors theses on topics in Economics and Finance.

ADDITIONAL COURSE CONSIDERATIONS

ECO 455 and additional Mathematics courses are strongly recommended for students wishing to obtain graduate degrees in Economics and Finance.

- Economics Major (p. 249)
- Business Economics Major (p. 248)

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. Students must complete the appropriate minor request form.

ECONOMICS MINOR

Required Courses

ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
ECO 255	Business Statistics I	3

Economics Electives

Four courses at the 200, 300, or 400 level one of which must be ECO 205 or ECO 206	12
Total Credits	21

ECO 101 Principles of Macroeconomics 3 Credits
 Explanation of market system through supply and demand analysis. Measurement of macroeconomic variables and development of economic models to analyze problems of unemployment, inflation and economic growth. Various fiscal and monetary policies will be discussed.
Fulfills College Core: Field 5 (Social Sciences)

ECO 102 Principles of Microeconomics 3 Credits
 Explanation of how the market system operates in the context of limited resources. Emphasis on the manner in which consumers and firms determine what to produce, how to produce and for whom to produce.
Fulfills College Core: Field 5 (Social Sciences)

ECO 205 Intermediate Microeconomic Analysis 3 Credits
 Analysis of demand and supply under various market structures. Cost and production theory, factor pricing, and welfare economics.
Prerequisite: ECO 101 & ECO 102.

ECO 206 Intermediate Macroeconomic Analysis 3 Credits
 The determination of national income and product in the short run and long run. Unemployment, inflation, fiscal and monetary policy will be examined in the context of static and dynamic macroeconomic models.
Prerequisite: ECO 101 & ECO 102.

ECO 255 Business Statistics I 3 Credits
 Fundamental concepts of probability and statistics with emphasis on business and economic applications. Organizing and describing data, probability theory, sampling, estimation and hypothesis testing.

ECO 256 Business Statistics II 3 Credits
 Hypothesis testing, regression analysis, goodness of fit, contingency tables, analysis of variance, time series analysis and forecasting.
Prerequisite: ECO 255.

ECO 310 Introduction to Geographic Information Systems 3 Credits
 An applied introduction to Geographic Information Systems (GIS), a mapping and spatial analysis tool that is widely used in education, government, and industry to solve spatial problems. This course combines lectures and hands-on exercises and provides students the opportunity to use ArcGIS software.
Prerequisite: ECO 101 & ECO 102, or permission of the instructor.

ECO 311 Metropolitan Economic Development and GIS 3 Credits
 Economic development is an essential component of local policy and governing, and a perceived driver of success and vitality for cities, metropolitan areas and regions. This applied course will introduce students to basic economic development theory and commonly used economic performance measures within a Geographic Information Systems (GIS) environment.
Prerequisite: ECO 101 & ECO 102.

ECO 320 Environmental Economics 3 Credits
 How economic analysis can be applied to promote the efficient and equitable use of natural resources, such as land, air, soil, fauna and flora. Emphasis on how the principles of economic analysis can be applied to design policies that reduce or eliminate harmful environmental impacts such as pollution and environmental degradation and improve human welfare through natural resource management. Examines how best to strike a balance between economic activity and environmental quality.
Prerequisite: ECO 101 & ECO 102.

ECO 321 Economic Impact Analysis 3 Credits

Estimation of the impact of investment, public spending, and changes in taxation or regulatory policy on a regional economy. The impact of a new project on sales, income and employment will be projected. Case studies and hands-on experience using multiple software packages will be used to conduct analysis.

Prerequisite: ECO 101, ECO 102 & ECO 255.

ECO 330 Money, Banking and the Economy 3 Credits

The connection between financial markets, the economy and the Federal Reserve. Examination of the nature of financial markets, the determination of interest rates, bank management and regulation, money and monetary policy. Emphasis on the impact of monetary policy on the macro economy. This course also serves as a Finance elective.

Prerequisite: ECO 101 & ECO 102.

ECO 411 State and Local Finance 3 Credits

Municipal credit risk and municipal bonds analysis of revenue sources for state and local governments. Public/ private sector interaction in urban areas, city-suburban fiscal disparity and competition, state/local government structure, inter-governmental relations. This course also serves as a Finance elective.

Prerequisite: ECO 101, ECO 102, & ECO 256 (or equivalent).

ECO 455 Econometrics 3 Credits

Estimation and analysis of linear and non-linear regression models using statistical inference. Topics include multicollinearity, heteroskedastic and serially correlated errors, forecasting, dummy variables and simultaneous equations models. Emphasis on analysis of data using EViews statistical software.

Prerequisite: ECO 205, ECO 206, & ECO 256 (or equivalent).

ECO 460 International Trade 3 Credits

Theory and practice of international trade, why countries trade, what explains the patterns of trade, and what are the effects of trade on a country's welfare and income distribution. Analysis of international trade policies and their implications.

Prerequisite: ECO 101 & ECO 102.

Fulfills College Core: Global Awareness

ECO 497 Internship 3 Credits

Student must complete a WSB Internship Application Form. May be used for Economics elective credit. Pass/Fail only.

Prerequisite: student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair, & associate dean.

ECO 499 Independent Research 3 Credits

Students must work with a faculty mentor to develop their learning goals and complete a Wehle School of Business Independent Study Application Form.

Prerequisite: student must complete a WSB Independent Study Application Form and obtain the approval of a faculty supervisor, department chair, & the associate dean.

Business Economics

Chair: Mark P. Zaporowski, PhD

INTRODUCTION

Economics BS Program – Business Economics

The objective of the Economics curriculum is to provide students with an understanding of the economic environment in which they will participate as professionals. The major in Economics requires a sequence of economics courses from which the student is expected to obtain an understanding of

the economic environment and the ability to develop solutions to economic problems that exist in society. In addition, Business Economics majors in the Richard J. Wehle School of Business take a set of courses called the Business Core Curriculum (p. 235). The Business Core is designed to provide students with a breadth of important business skills and knowledge that will allow them to grow and become leaders in their organizations.

Many economics graduates find rewarding and challenging employment in government and industry positions where their specialized training is put to the test and found valuable. Other students choose to deepen their knowledge of economics by attending graduate school. Still others find professional studies in business, law and health sciences more rewarding because of their economics training. For further information about this program, please consult the Economics webpage (<https://www.canisius.edu/academics/programs/economics>).

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Business Core

Required courses for all business majors (p. 235) ¹		49-51
Economics Major Requirements		
ECO 205	Intermediate Microeconomic Analysis	3
ECO 206	Intermediate Macroeconomic Analysis	3
Economics Electives		
Four courses at the 300 or 400 level		12
Total Credits		67-69

¹ To satisfy the Business Core mathematics requirement, MAT 115 is recommended over options for Business Economics majors. However, students who are not well prepared in mathematics may wish to take MAT105 and MAT106 before moving on to more advanced math courses. Additional mathematics courses are recommended if the student is preparing for a graduate program in economics or finance. Students are strongly encouraged to consult with a department adviser if they have questions about the best way to satisfy the Business Core mathematics requirement.

MAJOR ELECTIVES

Up to 2 of the following courses (with a minimum grade of C- in each) may be substituted for Economics elective credit:

MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 222	Differential Equations	3

Accounting courses beyond ACC 202

All 300 and 400 level Finance courses serve as Economics electives

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
FYS 101	ENG 101
ECO 101	ECO 102
Select one of the following:	MAT 106 (or Free Elective if MAT 109, MAT 111 or MAT 115 is taken in the fall.)
MAT 105 or MAT 109, MAT 111, or MAT 115	PHI 101
RST 101	Business International Requirement II
Business International Requirement I	GRIF 101
GRIF 101	

Sophomore

Fall	Spring
ACC 201	ACC 202
ECO 205	ECO 206
ECO 255	ECO 256
ISB 101	FIN 201
Field of Knowledge 4	MGT 101

Junior

Fall	Spring
ECO Elective	ECO Elective
MKT 201	MGT 325
Field of Knowledge 1	MGT 370
Field of Knowledge 3	Field of Knowledge 2 (Ethics)
Field of Knowledge 6	A&S Elective

Senior

Fall	Spring
ECO Elective	ECO Elective
Core Capstone	MGT 446
A&S Elective	A&S Elective
Free Elective	A&S Elective
Free Elective	Free Elective

LEARNING GOALS AND OBJECTIVES

STUDENT LEARNING GOAL 1

ECONOMICS MAJORS WILL SOLVE PROBLEMS WITHIN AN ECONOMIC FRAMEWORK.

Students will be able to:

- Objective A: Analyze economic problems.
- Objective B: Conceptually evaluate the economic consequences of potential solutions to economic problems

Student Learning Goal 2

STUDENTS WILL BE ABLE TO THINK CRITICALLY USING VARIOUS ECONOMIC FRAMEWORKS.

Students will be able to:

- Objective A: Critically assess economic arguments.

- Objective B: Apply analytic tools in evaluation of economic outcomes.

Student Learning Goal 3

STUDENTS WILL UNDERSTAND MACROECONOMIC FRAMEWORKS.

Students will be able to:

- Objective A: Display an understanding of the determinants of macroeconomic equilibrium.
- Objective B: Analyze the impact of exogenous or policy related shocks on macroeconomic equilibrium.

Student Learning Goal 4

STUDENTS WILL UNDERSTAND MICROECONOMIC FRAMEWORKS.

Students will be able to:

- Objective A: Display an understanding of the determinants of the consumer behavior model in the context of consumer demand.
- Objective B: Display an understanding of the theory of the firm in perfectly and imperfectly competitive markets.

Economics

Chair: Mark P. Zaporowski, PhD

INTRODUCTION

Economics B.A. Program

The Economics Department provides courses designed to help all Canisius students understand the national and global economy. The major in the College of Arts and Sciences provides preparation for entry-level and advanced positions in a variety of career choices through its broad based study of economic activity. Potential career choices include sales, marketing, production, finance and banking, and at various levels of government such as municipalities, local development authorities, the Federal Reserve, the Department of Labor and the Department of Commerce. All of these employers value the critical thinking and analysis skills fostered in an economics curriculum.

The Economics program has also proven to be an excellent preparation for graduate schools. Some students choose to continue the study of economics in PhD and master's programs. Other students use the strong analytical foundations of their economics training to pursue advanced degrees in business, health, public administration or law. For a more detailed description of the program including policies, faculty, facilities, academic and co-curricular opportunities please view the Economics program webpage (<https://www.canisius.edu/academics/programs/economics>).

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Mathematics Requirement ¹

Mathematics Requirement - Option 1: Two Course Sequence

MAT 105 Finite Mathematics

MAT 106 Calculus for the Non-Sciences

Mathematics Requirement - Option 2 - One of the following advanced courses:

MAT 109 Calculus with Review I

MAT 111 Calculus I

MAT 115 Calculus for Business

Economics Courses

ECO 101 Principles of Macroeconomics 3

ECO 102 Principles of Microeconomics 3

ECO 205 Intermediate Microeconomic Analysis 3

ECO 206 Intermediate Macroeconomic Analysis 3

ECO 255 Business Statistics I 3

ECO 256 Business Statistics II 3

Economics Electives

Five courses at the 300 or 400 level 15

Total Credits 37-39

¹ MAT 115 is recommended over options, although students who are not well prepared in mathematics may wish to take MAT 105 and MAT 106 before moving on to more advanced math courses. Additional mathematics courses are recommended if the student is preparing for a graduate program in economics or finance. Students should consult with a departmental adviser if they have questions about the most appropriate way to satisfy the mathematics requirement.

MAJOR ELECTIVES

Up to 2 of the following courses (with a minimum grade of C- in each) may be substituted for ECO elective credit: MAT 112, MAT 211, MAT 219, MAT 222. All Finance courses serve as Economics electives. ECO 455 and additional Mathematics and Accounting courses are strongly recommended for graduate school and the business world.

MAJOR EXPERIENCES

The department encourages internship experiences as part of the major and accepts one internship on a pass/fail basis as an Economics elective. Many of our majors have participated in the All-College Honors program and have written honors theses on topics in Economics and Finance.

ADDITIONAL COURSE CONSIDERATIONS

Economics majors may also obtain a concentration in Finance by using Economics electives to take the following courses:

FIN 201 Introduction to Finance 3

FIN 311 Corporate Finance 3

FIN 312 Investments 3

FIN 414 Portfolio Analysis 3

Any FIN elective at the 300 or 400 level

This specialization is appropriate for students who wish to make a career in banking or finance.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall FYS 101 Spring ENG 101

ECO 101 ECO 102

Select one of the following math courses: PHI 101

MAT 105, MAT 109, MAT 111 or MAT 115 MAT 106 (or Free Elective if MAT109, MAT 111 or MAT 115 was taken in the fall.)

RST 101 Free Elective

Free Elective

Sophomore

Fall ECO 205 Spring ECO 206

ECO 255 ECO 256

Field of Knowledge 4 ECO Elective

Free Elective Free Elective

Free Elective Free Elective

Free Elective Free Elective

Junior

Fall ECO Elective Spring ECO Elective

ECO Elective ECO Elective

Field of Knowledge 1 Field of Knowledge 2

Field of Knowledge 3 Free Elective

Field of Knowledge 6 Free Elective

Free Elective Free Elective

LEARNING GOALS AND OBJECTIVES

STUDENT LEARNING GOAL 1

Economics Majors will solve problems within an Economic framework.

Students will be able to:

- Objective A: Analyze economic problems.
- Objective B: Conceptually evaluate the economic consequences of potential solutions to economic problems

Student Learning Goal 2

Students will be able to think critically using various economic frameworks.

Students will be able to:

- Objective A: Critically assess economic arguments.
- Objective B: Apply analytic tools in evaluation of economic outcomes.

Student Learning Goal 3

Students will understand macroeconomic frameworks.

Students will be able to:

- Objective A: Display an understanding of the determinants of macroeconomic equilibrium.
- Objective B: Analyze the impact of exogenous or policy related shocks on macroeconomic equilibrium.

Student Learning Goal 4

Students will understand microeconomic frameworks.

Students will be able to:

- Objective A: Display an understanding of the determinants of the consumer behavior model in the context of consumer demand.
- Objective B: Display an understanding of the theory of the firm in perfectly and imperfectly competitive markets.

Entrepreneurship

Director: Ji-Hee Kim, PhD

INTRODUCTION

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Entrepreneurship webpage (<https://www.canisius.edu/academics/programs/entrepreneurship>).

The Entrepreneurship Major at Canisius College includes the study of subjects traditional business programs rarely cover, such as how to start new business and how to run a small growth company. The major offers an integrated curriculum which draws upon management, marketing and finance to provide students a broad background in business while developing entrepreneurial skills and insights. The entrepreneurship curriculum emphasizes creativity, innovation and interpersonal skills.

Students learn to identify and evaluate business opportunities, acquire capital and other resources, and start, develop, grow and sell a business concept. Entrepreneurship Majors are encouraged to develop a business concept and make it a reality. A key component of the curriculum is a year-long experience in which juniors and seniors develop business plans for a company, ideally one that they will eventually start and operate themselves. Real-world experience is part of the bedrock of a Canisius business education. In some courses, entrepreneurship majors act as consultants to small businesses. With faculty guidance, students work on projects for and advise practicing entrepreneurs. Students gain valuable insight by examining failure as well as success and often help their clients fix what is going wrong.

The Entrepreneurship Major is career-oriented with courses built upon a business core but tailored to the needs of entrepreneurs. Students discover their innate entrepreneurial potential and develop a set of tools and perspectives to capitalize on it.

The Canisius program prepares students to

1. acquire an existing business or franchise;
2. start up a new venture;
3. manage an existing family business for growth; and/or
4. engage in intrapreneurship — the development of new products or programs — or the evaluation and pursuit of potential mergers or acquisitions within a mature corporation.

CAREER OPPORTUNITIES

Gaining experience on their own is natural for Entrepreneurship Majors. Some Canisius College students start and run a business while still pursuing their degrees. A car detailing firm, a landscaping service, a small business promotional agency and a retail store are current examples. Virtually all graduates of the Canisius College entrepreneurship program are involved in their own business ventures.

INTERNSHIPS

The Entrepreneurship Major at Canisius College strongly emphasizes hands-on experience in addition to a high-quality curriculum.

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall GPA to graduate with a degree in Entrepreneurship. All students must complete a minimum of 120 credit hours to graduate.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Business Core

Required courses for all business majors (p. 235) 49-51

Additional Requirements for Entrepreneurship Major

ENT 101	Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation	3
ENT 201	Introduction to Entrepreneurship	3
ENT 401	Small Business Management and Entrepreneurship	3
ENT 402	New Venture Creation	3

Major Electives

Select three of the following electives. At least two of these electives must be offered by the Entrepreneurship program (ENT courses). 9

ENT 311	Entrepreneurship and Family Business ¹	
ENT 312	International Entrepreneurship ¹	
ENT 314	Social Entrepreneurship and Sustainability ¹	
ENT 414	Franchising and Entrepreneurship ¹	
ENT 496	Internship in Entrepreneurship	
ENT 499	Entrepreneurship Independent Study	
MGT 360	Organizational Behavior	
MGT 364	Human Resources Management	
MGT 437	Project Management	
MGT 460	Ethical Power and Influence for Leaders	
MGT 472	Comparative Management Systems (International)	
MKT 320	Consumer Behavior	
DMA 201	Introduction to Digital Media	

Total Credits 70-72

¹ The following courses are strongly recommended as Entrepreneurship electives: ENT 311, ENT 312, ENT 314, ENT 414.

Students in the Entrepreneurship major are expected to become members of the Canisius College Chapter of the Collegiate Entrepreneurs' Organization (CEO) and/or member of the Canisius Innovation Lab (CIL).

Recommended Semester Schedule for Major Course Requirements

Freshman

Fall	Spring
FYS 101	ENT 101
Select one of the following math courses:	MAT 106 (or Arts & Science Elective if MAT 109, MAT 111, or MAT 115 was taken in fall)
MAT 105 or MAT 109, MAT 111 or MAT 115	ECO 102
RST 101	ENG 101
ECO 101	Business International Requirement
Business International Requirement	

Sophomore

Fall	Spring
ENT 201	MGT 101
ACC 201	ACC 202
ISB 101	PHI 101
History (Field of Knowledge 4)	ECO 256
ECO 255	MKT 201

Junior

Fall	Spring
ENT Elective	ENT Elective
FIN 201	ENT 401
Natural Science (Field of Knowledge 6)	MGT 325
Arts (Field of Knowledge 3)	Philosophy (Field of Knowledge 2 with Ethics attribute)
Religion (Field of Knowledge 1)	Arts and Sciences Elective

Senior

Fall	Spring
ENT 402	Free Elective
ENT Elective	Free Elective
MGT 370	MGT 446
Core capstone	Arts and Sciences Elective
Arts and Sciences Elective	Free Elective

LEARNING GOALS AND OBJECTIVES

Student Learning Goal 1

Entrepreneurship Majors will apply a working knowledge of the principles of entrepreneurship to analysis and problem solving.

Students will:

- Objective A: Identify and apply the elements of entrepreneurship and to entrepreneurial processes;
- Objective B: Recognize the importance of entrepreneurship and identify the profile of entrepreneurs and their role in economic growth;
- Objective C: Use the entrepreneurial mind-set and behave responsibly and ethically in their roles as entrepreneurs.

Student Learning Goal 2

Entrepreneurship Majors will be able to create and start new ventures.

Students will:

- Objective A: Creatively analyze the business environment, opportunity recognition, and the business idea-generation process;
- Objective B: Know how to acquire necessary resources and organizational matters of new venture creation process;
- Objective C: Write a business plan that creates and starts a new venture.

Student Learning Goal 3

Entrepreneurship Majors will know how to manage and grow new ventures.

Students will:

- Objective A: Apply a strategy for growth and manage the implications of growth;

- Objective B: Use capital budgeting that includes cost of capital, leverage and dividend policy in a financial management context;
- Objective C: Know how to acquire resources for growth from external sources.

INTERDISCIPLINARY ENTREPRENEURSHIP MINOR

Beginning in fall of 2017, the Department of Management will offer an Interdisciplinary Entrepreneurship Minor. This minor is designed for students who want to expand their educational opportunities, knowledge, and experiences in entrepreneurship (either for-profit and/or not-for-profit). Students enrolled in this minor will learn to develop an entrepreneurial mindset which includes the ability to recognize creative business opportunities. Students will also learn how to develop the business plans needed to pursue these opportunities and bring business ideas to life. The Interdisciplinary Entrepreneurship Minor promotes academic excellence, innovation and student success by providing excellent, diverse, and innovative learning experiences and opportunities.

Any student from business, arts and sciences, or education and human services may enroll in the Interdisciplinary Entrepreneurship Minor regardless of their chosen major. To enroll, students must complete the appropriate minor request form. For additional information or questions, please contact Dr. Ji-Hee Kim, Director of Entrepreneurship and Associate Professor of Management by email at kim15@canisius.edu or by calling at 716-888-2606.

Students enrolled in the Interdisciplinary Entrepreneurship Minor are expected to become members of the Canisius Chapter of the Collegiate Entrepreneurs' Organization (CEO) and/or Canisius Innovation Lab (CIL).

Curriculum

Required Courses

ENT 101	Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation	3
ENT 201	Introduction to Entrepreneurship	3
ENT 401	Small Business Management and Entrepreneurship	3

Electives (3 courses)

Select 3 of the following electives. At least 2 of these electives must be offered by the Entrepreneurship program (ENT numbered courses). Students in any business major can not select MGT 101, MKT 201, or ACC 201 as electives for the minor.

ENT 311	Entrepreneurship and Family Business	3
ENT 314	Social Entrepreneurship and Sustainability	3
ENT 402	New Venture Creation	3
ENT 496	Internship in Entrepreneurship	3
ABEC 363	Canine Evolution, Behavior and Cognition	3
ANT 350	Business Anthropology	3
ANT 351	Qualitative Research Methods	3
DMA 201	Introduction to Digital Media	3
DMA 215	Digital Media Culture	3
MGT 101	Introduction to Management ¹	3
MKT 201	Principles of Marketing ¹	3
ACC 201	Financial Accounting ¹	3

Total Credits 18

¹ Business majors may not use MGT 101, MKT 201 or ACC 201 as electives for the minor.

ENT 101 Experiential Entrepreneurship: Creativity, Innovation, Opportunity, and Idea Generation 3 Credits

Provides a broad introduction to entrepreneurship and prepares students for developing a mindset for thinking creatively, using innovation, recognizing opportunities and generating entrepreneurial ideas. Other topics include strategic and tactical planning and entrepreneurial activities of an actual business enterprise. Students will participate in the "Business Idea Elevator Pitch Competition." Open to business and non-business majors including students from the College of Arts and Sciences and the School of Education and Human Services.

Fulfills College Core: Oral Communication

Offered: every spring.

ENT 102 Student Startup Accelerator 1 Credit

Student must already have a business idea. This course requires approval from the instructor, the program director, or department administrative associate.

ENT 201 Introduction to Entrepreneurship 3 Credits

Provides an understanding of the entrepreneurial process from both conceptual and applied perspectives. Topics include creativity, innovation, the characteristics of entrepreneurs, common issues encountered by entrepreneurs, entrepreneurial marketing, entrepreneurial finance, and organizational strategies for new business enterprises. Students will engage in entrepreneurial projects. Open to business and non-business majors.

Offered: every fall.

ENT 311 Entrepreneurship and Family Business 3 Credits

Provides students with an understanding of key concepts related to and challenges faced by family businesses. Students will learn about ways to foster healthy family businesses through the use of innovative tools and via hands-on learning. The course will explore how the dynamics of a family unit can both help and hinder the success of a business organization. Issues such as mentoring, succession planning and family creeds and councils, and the special problems of family businesses and other closely-held corporations will be explored. Attention will also be devoted to family business planning, effective governance approaches in family businesses, preparing heirs for entry into and management of family firms, and tax and compensation planning.

Prerequisite: either ENT 201 or both MGT 101 & MKT 201. **Restriction:** junior or senior standing.

Offered: every fall.

ENT 312 International Entrepreneurship 3 Credits

Explores international entrepreneurship -- its dimensions and importance -- and how it differs from other areas of international business. Students learn to identify and analyze information available for entrepreneurs seeking to move internationally and to address the important strategic issues in international entrepreneurship. May be used as ENT and/or IBUS elective.

Prerequisite: either ENT 201 or both MGT 101 & MKT 201. **Restriction:** junior or senior standing.

Offered: occasionally.

ENT 314 Social Entrepreneurship and Sustainability 3 Credits

This practitioner-oriented course focuses on innovative, values-driven organizations which have explicit civic missions or social purposes and which are most typically associated with the not-for-profit sector of the economy. The chief aims of the course are to help students understand and appreciate the role of the nonprofit sector in creating societal wealth in the economy, to engage participants in institutional efforts to create a good society through exposure to the work of these organization, and to have students consider a variety of forms of involvement available to aspiring entrepreneurs in preparing for leadership roles in their communities.

Prerequisite: Either ENT 201 or both MGT 101 & MKT 201. **Restriction:** junior or senior standing.

Offered: every spring.

ENT 401 Small Business Management and Entrepreneurship 3 Credits

Focuses on the most common problems encountered by owners, managers, and entrepreneurs in organizing and operating small enterprises. Topics include creativity, and innovation; entrepreneurial strategy; pursuing new venture opportunities; the new venture business plan; creative small business marketing; innovative small business management; financial management in the entrepreneurial firms; and legal requirements. Students will obtain entrepreneurial experience through working with entrepreneurs and small business enterprises.

Prerequisite: either ENT 201 or MGT 101, FIN 201, ACC 202, & MKT 201. Entrepreneurship majors must complete ENT 201. **Restriction:** junior standing or higher.

Offered: every spring.

ENT 402 New Venture Creation 3 Credits

Capstone course required of all entrepreneurship majors at the end of the program. Students develop an original idea for a new venture and write a comprehensive business plan for that venture. An integration of the theory and practice of entrepreneurship. The course focuses on identifying opportunities for a new venture and the process of starting and growing a new business. The business plan will apply key principles and concepts to real world situations. Students must participate the New York State Business Plan Competition and other required activities to complete this course to get a final grade during the following spring semester. Please note that this class counts as an Entrepreneurship Major Capstone class, but does NOT count toward the Canisius Core Curriculum.

Prerequisite: ENT 401. **Restriction:** junior or senior standing.

Offered: every fall.

ENT 414 Franchising and Entrepreneurship 3 Credits

Analytical approach to understanding the basic forms of franchising, legal agreements and requirements in franchising businesses. Explores how to foster a new generation of independent business owners and reasons for buying a franchise.

Prerequisite: MGT 101. **Restriction:** junior standing.

Offered: occasionally.

ENT 496 Internship in Entrepreneurship 1-3 Credits

Non-routine job experiences that link specific entrepreneurship topics and academic concepts with practical experience. Requires supervision by faculty and student demonstration of academic value through papers and reports. Internships require an application and approval by the associate dean.

Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

Offered: fall, spring, & summer.

ENT 497 Internship in Korea 3 Credits

Global business demands an international perspective. Students in the program are encouraged to participate in an international entrepreneurial summer internship in Korea. This may take place at one of the many international and entrepreneurial agencies and companies in South Korea. Non-routine job experiences that link academic concepts with practical experience. Requires supervision by the Director of Entrepreneurship and student demonstration of academic value through practical work experiences, papers, and reports. This course can be used as an ENT elective, and/or study abroad in Korean credits.

Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

Offered: fall, spring, & summer.

ENT 499 Entrepreneurship Independent Study 1-4 Credits

Limited availability and only available by application and approval by the associate dean.

Prerequisite: student must complete a WSB Independent Study Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

Offered: occasionally.

Finance

Chair: Mark P. Zaporowski, PhD

INTRODUCTION

Finance BS Program

The analytical tools and problem-solving skills fostered in the Finance major will prove useful to any student who wishes to pursue a career in security analysis, business valuation, corporate management, investments, banking, real estate, insurance or small business. The program provides a concentration designed to help the student prepare for exams for licenses as Chartered Financial Analysts (CFA), Certified Financial Planners (CFP) and Insurance Brokers. A Finance concentration is also available through the Economics major. Interested students should contact the department chair. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to Finance webpage (<https://www.canisius.edu/academics/programs/finance>).

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall GPA to graduate with a degree in Finance. All students must complete a minimum of 120 credit hours to graduate.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Dual majors in Business Economics and Finance are required to take six electives in total. Two must be Economics electives and four must be Finance electives.

Note: A strong accounting background is desired by many corporations seeking job candidates with degrees in finance. For those who desire a career in corporate finance, ACC 303 is strongly recommended. FIN 455 is strongly recommended because many entry-level positions in finance require experience with financial modeling using personal computers

MAJOR EXPERIENCES

The Golden Griffin Fund (GGF) is a real money investment fund run by Canisius students under the guidance of designated faculty members and local investment industry advisors. The fund selects students from applicants in the spring of their junior year for year-long participation during their senior year. The student researches firms (under appropriate guidance) for possible inclusion in the GGF portfolio. Students who have completed this year-long experience have had exceptional success in securing employment in high-profile companies.

The department also encourages internship experiences as part of the major and accepts one internship on a pass/fail basis as a Finance elective. Many of our majors have participated in the All-College Honors program and have written honors theses on topics in Economics and Finance.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Business Core

Required courses for all business majors (p. 235)		49-51
Additional Requirements for the Finance Major		
FIN 311	Corporate Finance	3
FIN 312	Investments	3
FIN 414	Portfolio Analysis	3
Finance Electives		
Four courses at the 300 or 400 level		12
Total Credits		70-72

MAJOR ELECTIVES

Up to 2 of the following courses (with a minimum grade of C- in each) may be substituted for Finance elective credit:

MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 222	Differential Equations	3
Accounting courses beyond ACC 212		

For students majoring in Finance only, ECO 205, 206, 330, 411, and 455 count as FIN electives. For dual ECO & FIN majors, 4 of the 6 electives should be Finance courses. See the department chair for an up-to-date list of Economics courses that qualify as Finance electives.

ADDITIONAL COURSE CONSIDERATIONS

- FIN 455 is strongly recommended for students wishing to pursue careers in banking, securities analysis or other financial services.
- Additional Mathematics courses are strongly recommended for students wishing to obtain graduate degrees in Economics and Finance.
- A strong accounting background is desired by many corporations seeking job candidates with degrees in finance. For those who desire a degree in corporate financial planning, ACC 303 is strongly recommended.

Recommended Semester Schedule for Major Course Requirements

Freshman

Fall	Spring
FYS 101	ENG 101
ECO 101	ECO 102
Select one of the following:	MAT 106 (or A&S Elective if MAT 109, MAT 111 or MAT 115)
MAT 105 or MAT 109, MAT 111 or MAT PHI 101 115	
RST 101	MGT 101
ISB 101	

Sophomore

Fall	Spring
ECO 255	ECO 256
ACC 201	FIN 201
MKT 201	ACC 202
Field of Knowledge 4	Field of Knowledge 3

Business International Requirement I Business International Requirement II

Junior	
Fall	Spring
FIN 311	FIN 414
FIN 312	FIN Elective
MGT 325	Field of Knowledge 1
Field of Knowledge 2 (Ethics)	A&S Elective
Field of Knowledge 6	A&S Elective
Senior	
Fall	Spring
FIN Elective	FIN Elective
FIN Elective	MGT 446
MGT 370	A&S Elective
Core Capstone	Free Elective
A&S Elective	Free Elective

LEARNING GOALS AND OBJECTIVES

Student Learning Goal 1

Graduates will demonstrate an understanding of the theory and practice of Corporate Finance.

Students will be able to:

- Objective A: Perform a capital budgeting analysis.
- Objective B: Compute a firm's weighted average cost of capital.
- Objective C: Know the issues involved in developing an optimal capital structure for a firm.
- Objective D: Know the issues a firm must consider in setting its dividend policy.

Student Learning Goal 2

Graduates will demonstrate an understanding of the theory and practice of Investment.

Students will be able to:

- Objective A: Know the characteristics of the various investment instruments.
- Objective B: Value stocks and bonds.
- Objective C: Determine the gains and losses from option trading strategies.
- Objective D: Demonstrate an understanding of the basic ethical issues relating to insider trading.

Student Learning Goal 3

Graduates will demonstrate an understanding of the theory and practice of Portfolio Management.

Students will be able to:

- Objective A: Construct Markowitz efficient portfolios.
- Objective B: Assess the performance of investment managers.
- Objective C: Understand the issues of market efficiency, behavioral finance and their implications regarding valuable information.

FIN 100 Personal Finance 3 Credits

This course provides an introduction to the field of personal financial management. You will be introduced to the financial planning process and the following topics: budgeting, time value of money, investment products, risk and return, banking, insurance, credit and debt, income taxes, and retirement planning. This is not a credit bearing elective course for Finance or Economics majors.

FIN 201 Introduction to Finance 3 Credits

An introduction to financial analysis. Topics covered include: financial statements, tools of financial analysis, bond and equity valuation, financial management.

Prerequisite: ECO 101, ECO 102, & ECO 255 (may register concurrently).

FIN 311 Corporate Finance 3 Credits

Examination of the procedures and objectives of capital budgeting, the financing of the firm by means of debt and equity, and short-term and long-term financial management.

Prerequisite: FIN 201.

FIN 312 Investments 3 Credits

Introduction to the institutional features of securities trading, portfolio construction, and the capital asset pricing model. Valuation of equities and bonds and an introduction to various derivative instruments.

Prerequisite: FIN 201 & ECO 256.

FIN 350 Introduction to Financial Planning 3 Credits

Survey of topics in wealth management and personal financial planning. Review development of the wealth management industry, including the evolution of the high-net-worth investor segment. Various approaches to asset management, benchmarks for evaluating portfolio performance, risk tolerance, and tax and estate planning issues will be explored.

Prerequisite: FIN 312.

FIN 412 Equity Analysis 3 Credits

The analysis and interpretation of financial information and accounting statements in order to assess security risk and return, credit worthiness, financing needs, and the valuation of the firm.

Prerequisite: FIN 311 & FIN 312.

FIN 414 Portfolio Analysis 3 Credits

An introduction to modern portfolio theory and management. The strategies underlying portfolio construction and evaluation will be examined. The implications of market efficiency on portfolio management will also be considered. Finance Major Assessment will be performed in this class.

Prerequisite: FIN 311 & FIN 312.

FIN 420 Financial Institutions and Markets 3 Credits

Examines the financial services industry and the role that financial intermediaries play in the rapidly changing marketplace. This course cannot be used as a major elective if you have already taken ECO 330.

Prerequisite: FIN 201.

FIN 423 Fixed Income Securities 3 Credits

This course discusses the various types of fixed income securities and the markets in which they are traded. Emphasis is placed on contract evaluation, extracting term/risk structure information from pricing, evaluating investment opportunities and interest rate risk management.

Prerequisite: FIN 312.

FIN 425 Advanced Corporate Finance 3 Credits

This course provides a more in-depth treatment of corporate financial management. Topics from the introductory course (FIN 311) are developed in greater detail with emphasis on the underlying theories and more extensive applications to financial decision making.

Prerequisite: FIN 311.

FIN 455 Financial Modeling 3 Credits

Programming in EXCEL via construction of custom functions and macros using Visual Basic. These techniques are applied to a variety of financial models.

Prerequisite: FIN 201.

FIN 456 Business Analytics Using R 3 Credits

Prerequisites: FIN 311 or FIN 312 or permission of instructor

FIN 465 International Banking&Finance 3 Credits

Examination of international trade finance with a focus on how import/export trade transactions are handled by multinational banks in the global economy. Emphasis is also placed on foreign exchange rates and risk exposures facing large corporations involved in international trade. The course provides practical applications and issues faced by internationally active banking organizations.

Prerequisite: FIN 201.

FIN 480 Derivative Securities/Options 3 Credits

Analysis of derivative instruments such as options, futures, swaps, warrants, and convertibles. Emphasis on valuation and use of derivative instruments in hedging risk.

Prerequisite: FIN 311 & FIN 312.

FIN 485 Golden Griffin Fund I 3 Credits

This is the first course in a two-semester sequence in which students become equity analysts and portfolio managers for a real money portfolio of common equity securities (the Golden Griffin Fund, "GGF"). Students screen companies in the fall semester and perform detailed financial statement and valuation analyses in the spring semester. Current macroeconomic and financial market developments are discussed weekly. Monthly written reports regarding current GGF portfolio positions are produced by the student managers beginning in the summer. Students taking FIN 485 are expected to continue into the spring semester in FIN 486. NOTE: GGF students are selected during an application process during the student's junior year.

Prerequisite: FIN 311 & FIN 312; & completion of or concurrent registration in FIN 412, FIN 414, either FIN 420 or ECO 330, & FIN 480.

FIN 486 Golden Griffin Fund II 3 Credits

This is the second course in a two-semester sequence in which students become equity analysts and portfolio managers for a real money portfolio of common equity securities (the Golden Griffin Fund, "GGF"). Students screen companies in the fall semester and perform detailed financial statement and valuation analyses in the spring semester. Current macroeconomic and financial market developments are discussed weekly. Monthly written reports regarding current GGF portfolio positions are produced by the student managers beginning in the summer. process during the student's junior year.

Prerequisite: FIN 311 & FIN 312; & completion of or concurrent registration in FIN 412, FIN 414, either FIN 420 or ECO 330, & FIN 480.

FIN 496 Finance Internship 1-4 Credits

Internships require an application and approval by the associate dean.

Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

FIN 497 Internship 1-3 Credits

May be used for Finance elective credit. Pass/Fail only. Internships require an application and approval by the associate dean.

Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

FIN 499 Independent Research 3 Credits

Study and work with a faculty supervisor. Project to be determined by faculty agreement. Independent studies require an application and approval by the associate dean.

Prerequisite: student must complete a WSB Independent Study Application Form & obtain the approval of a faculty supervisor, department chair & the associate dean.

International Business Programs

Director: Coral Snodgrass, PhD

INTRODUCTION

The forces of globalization have had a dramatic impact on the business world. There have been so many global changes in the business world that people now often say that "doing business" is really doing "international business." The sheer volume of business that is being addressed is massive in scale. As an example, over \$1 billion worth of goods and services are traded each day between the United States and Canada! It is easy to see why companies today are in great need of people who know how to move money around the world, how to find new customers or where in the world to find the best suppliers. These are the skills that you will acquire by studying within the International Business major.

INTERNATIONAL BUSINESS MAJOR

The International Business major at Canisius is unique in the Western New York area because it combines the study of international business topics with those in the realms of modern language studies and international experience. The goals of the program are to help students to understand: (1) what happens in business when an international border is crossed; (2) how business changes when a language other than English is being used; and (3) how to cross an international border when doing business.

For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the International Business Program webpage (<https://www.canisius.edu/academics/programs/international-business>).

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall GPA to graduate with a degree in International Business. All students must complete a minimum of 120 credit hours to graduate.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Business Core

Required courses for all business majors (p. 235) 49-51

Additional Major Requirements

IBUS 301	Fundamentals of International Business	3
MKT 375	International Marketing	3
ECO 460	International Trade	3
MGT 472	Comparative Management Systems	3

Elective Requirements

International Business Electives (3 Courses) 9

Total Credits 70-72

MAJOR ELECTIVES

A list of courses from a variety of departments and programs have been approved for use as International Business electives. Please consult with your adviser or the program director for an up-to-date list of approved courses.

MAJOR EXPERIENCES

Study Abroad Requirement: all students are required to complete a study abroad experience. This usually takes the form of a semester abroad during the second semester of the junior year. Alternative programs during the summer are also available.

ADDITIONAL COURSE CONSIDERATIONS

Language Requirement: all students are required to complete a modern language sequence through the 216 level. It is not necessary that this language be the one spoken in the country in which the student studies abroad. Two of these courses will also count toward the International Business Requirement in the Business Core curriculum.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
FYS 101	ENG 101
Select one of the following:	MAT 106 (or A&S elective if MAT 109, MAT 111 or MAT 115 was taken in the fall.)
MAT 105 or MAT 109, MAT 111, or MAT 115	PHI 101
RST 101	ECO 102
ECO 101	Business International Requirement (a 216 Level Modern Language Course)

Business International Requirement (a 215 Level Modern Language Course)

Sophomore

Fall	Spring
MKT 201	FIN 201
ACC 201	ACC 202
Field of Knowledge 4 - History	Field of Knowledge 3 - Arts
ECO 255 (Mathematics Field)	ECO 256
ISB 101	MGT 101

Junior

Fall	Spring
IBUS 301	MGT 472
MGT 325	IBUS Elective
ECO 460	MKT 375
Field of Knowledge 6 - Science	Field of Knowledge 2 - Philosophy
Field of Knowledge 1 - Religion	A&S Elective

Senior

Fall	Spring
MGT 370	MGT 446
IBUS Elective	IBUS Elective
Free Elective	Free Elective
Core Capstone	A&S Elective
A&S Elective	A&S Elective

LEARNING GOALS & OBJECTIVES FOR THE INTERNATIONAL BUSINESS PROGRAM

Student Learning Goal 1: Students will analyze the international environments in which businesses operate.

Students will be able to:

- Objective A: Examine the elements of societal culture, especially ethics and social responsibility
- Objective B: Identify the critical aspects of the external environment that must be modified when expanding from a domestic to an international market

Student Learning Goal 2: Students will model the data from the international environments to support decision making.

Students will be able to:

- Objective A: Integrate the complex aspects of the international environment into a cohesive decision model.
- Objective B: Find, analyze, and apply international data

Student Learning Goal 3: Students will solve problems related to international competition.

Students will be able to:

- Objective A: Perform international marketing screening processes
- Objective B: Apply models for analyzing competitive positioning in order to develop international market opportunities

IBUS 301 Fundamentals of International Business 3 Credits

Study of the international dimensions of the basic functional areas of business. The course begins with a study of the comparative advantage of nations; progresses through the functional areas of accounting, finance, management and marketing; ending with the design of strategies for success in international markets.

IBUS 496 International Business Internship 3 Credits

Internships require an application and approval by the associate dean.

Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

IBUS 499 International Business Independent Study 1-3 Credits

Study and work with a faculty supervisor. Project to be determined by faculty agreement. Independent studies require an application and approval by the associate dean.

Prerequisite: student must complete a WSB Independent Study Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

REQUIRED COURSES FROM OTHER PROGRAMS

MKT 375 International Marketing 3 Credits

Issues involved in marketing products in global markets. The focus is on identifying opportunities in world markets and adapting strategies to fit specific national market needs. Formerly MKT 475.

Prerequisite: MKT 201 or permission of instructor.

Fulfills College Core: Global Awareness

Offered: spring.

ECO 460 International Trade 3 Credits

Theory and practice of international trade, why countries trade, what explains the patterns of trade, and what are the effects of trade on a country's welfare and income distribution. Analysis of international trade policies and their implications.

Prerequisite: ECO 101 & ECO 102.

Fulfills College Core: Global Awareness

MGT 472 Comparative Management Systems 3 Credits

International business emphasizing differences in systems. Context and traditions in different countries and regions: social, political, governmental, business, labor, ethical, cultural analysis. Different management and business practices. Managing and doing business within and across many countries. Counts as a MGT elective.

Prerequisite: MGT 101 or permission of instructor.

Offered: spring.

Management

Chair: Lynn A. Fish, PhD

INTRODUCTION

Every organization includes individuals whose job it is to coordinate and integrate the activities of employees, manage operations and lead the organization successfully into the future. These individuals are managers.

Management is the art and science of getting things done through people. Good management is necessary for the success of any company or organization. It focuses on accomplishing organizational objectives through the coordination of people and other resources, and involves such activities as planning, organizing, leading, controlling, motivating and general problem solving and decision making. Managers today face the task of leading their companies as they compete in a global marketplace by designing and managing processes that create goods and/or services and add value for customers. They do this in multiple ways. Effective managers empower the workforce to face the challenges of complex and changing environments. They also manage an organization's operational and technological systems to satisfy customers. Such processes are critical in all firms from the smallest entrepreneurial company to the largest multinational corporation. Increasingly, managers and employees also focus on the impact organizational policies and practices on people and the planet.

The management major at Canisius prepares students to perform a variety of roles in business and not-for-profit organizations. The management major and management courses are designed to give students insight into human behavior, to develop students' understanding of organizational issues and processes, and to teach students how to analyze information, make decisions and implement solutions.

THE MANAGEMENT DEPARTMENT

The Management program is one of three majors offered by the Department of Management. The department also offers majors in Entrepreneurship and International Business and a variety of academic minors. With 11 full-time faculty, the department is one of the largest in the Richard J. Wehle School of Business. The department also offers a wide variety of co-curricular programs including student chapters of professional organizations, internships and research opportunities. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Management Program webpage (<https://www.canisius.edu/academics/programs/management>).

MANAGEMENT MAJOR

The Management major provides students with a balanced education to prepare them for a variety of important organizational roles. The curriculum includes basic coursework in quantitative analytical methods, operations management, behavioral science and human resource management and strategic management.

Students may take additional specialized courses and electives to add depth in one of four management minors: Global Logistics and Supply Chain Management, Human Resource Management, International Management, or Operations Management. Alternatively, they can work with an adviser in the department to choose their electives to fit their individual interests or needs.

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall GPA to graduate with a degree in management. All students must complete a minimum of 120 credit hours to graduate. Students must also maintain a 2.0 grade point average in courses credited toward completion of any minor administered by the Department of Management.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

Management majors are encouraged to consider earning dual majors with degree programs in International Business (p. 257), Entrepreneurship (p. 251), or Marketing (p. 266) based on their career goals and aspirations. Students interested in earning a dual major should speak with a departmental advisor early in the college program.

MAJOR EXPERIENCES

The management major is designed to give students a breadth of knowledge in a variety of business functions as well as a depth of understanding in operations management and organizational behavior and human resource management. Management electives can be used by students to pursue specific topics based on their interests or career aspirations.

Management majors are strongly encouraged to become actively involved in one of the Canisius College student chapters of professional organizations that are associated with the major: APICS – the Operations Management Society and SHRM – the Society for Human Resource Management. Students pursuing Management minors are expected to be involved in the student organization associated with their minor. The student organizations provide excellent opportunities for leadership development and professional networking through such activities as touring local organizations, attending professional meetings and seminars, and hosting local professionals at campus meetings. Participation in such organizations is an important part of preparation for a career.

Management majors are also strongly encouraged to complete internships (either for credit or not for credit).

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

The Management department offers a number of minor degree programs that are intended to provide attractive supplements to the Management major. Although these minor degrees were designed with Management majors in mind, they are available to any student that has taken the appropriate prerequisite courses. A list of these minors can be found earlier on this page and by clicking the Minors tab above.

ADDITIONAL INFORMATION

Internships

Internships qualifying for three hours of academic credits are available to upper-division students majoring in management. These opportunities involve a work-and-study arrangement with both workplace and faculty supervision. Many are paid. Students completing internships for credit must meet certain departmental requirements. For further information, contact the department chair or your departmental advisor. Non-credit internships are also available and can be a very important part of a student's development and career preparation.

Career Preparation

All management majors are expected to begin planning for their business careers as early as the freshman year. This planning process typically involves taking advantage of the career services offered by the Griff Center for Academic Engagement located in Old Main 016. These services include assessment tools for identifying attractive careers, resources for researching and exploring different careers, instruction in how to utilize various online tools for conducting a job search, preparation of resumes, interview skills training and other professional development services. The Griff Center staff offers a variety of workshops and seminars as well as providing one-on-one counseling and training to assist students preparing for the world of work. Finally, the Griff Center is the primary point of contact for employers seeking to hire students for internships and full-time jobs. Therefore, it is in students' best interest to work closely with the Griff Center throughout their college years to prepare for their future career.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Business Core

Required courses for all business majors (p. 235)

Additional Major Requirements

MGT 335	Management Science	3
MGT 336	Production/Operations Management	3
MGT 360	Organizational Behavior	3
MGT 364	Human Resources Management	3

Elective Requirements

Management Electives (3 Courses)		9
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Total Credits		70-72
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MAJOR ELECTIVES

Management majors are required to take three (3) courses that are approved as Management electives. Some courses offered by other programs may be used as management electives. Please consult your academic advisor or the advisement guide that is published each semester for an up-to-date list of these courses.

RECOMMENDED SEMESTER SCHEDULE FOR MANAGEMENT MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
FYS 101	ENG 101
Select one of the following:	MAT 106 (or Free Elective if MAT 109, MAT 111 or MAT 115 taken in fall)
MAT 105 or MAT 109, MAT 111 or MAT 115	PHI 101
RST 101	ECO 102
ECO 101 (Field of Knowledge 5 Social Science)	MGT 101
ISB 101	

Sophomore

Fall	Spring
MKT 201	FIN 201
ACC 201	ACC 202
Field of Knowledge 4 History	Field of Knowledge 3 Arts
ECO 255 (Field of Knowledge Math)	ECO 256
Business International Requirement	Business International Requirement

Junior

Fall	Spring
MGT 335	MGT Elective or MGT minor course
MGT 336	MGT 364 (Spring only)
MGT 360 (Fall only)	Arts and Sciences Elective
Field of Knowledge 6 Science	Field of Knowledge 1 Religion
Field of Knowledge 2 Philosophy (with ethics attribute)	Arts and Sciences Elective

Senior

Fall	Spring
MGT 370	MGT 446
MGT Elective or MGT minor course	MGT Elective or MGT minor course
Free Elective	Free Elective
Arts and Sciences Elective	Arts and Sciences Elective
Core Capstone	Free Elective

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Management Majors will be able to solve problems in operations management.

Students will:

- Objective A: Analyze the transformations of inputs into outputs through value-added process;
- Objective B: Apply management science techniques and interpret results from such applications.

Student Learning Goal 2

Management Majors will be knowledgeable about leadership and organizations.

Students will:

- Objective A: Understand major theories of leadership;
- Objective B: Evaluate theories of motivation in the workplace;
- Objective C: Understand principles of organizational structure and design.

Student Learning Goal 3

Management majors will be knowledgeable about issues of fairness and equity in the workplace

Students will:

- Objective A: Understand concepts and practices of justice in organizations;
- Objective B: Evaluate managerial practices pertaining to employment discrimination.

MANAGEMENT MINORS

Management (and other business major) students may choose one of the minors below in their junior or senior year and notify the registrar and their department advisor of this decision. Alternatively, they can consult with an advisor in the department to select management electives that meet their individual interests or needs. Students who are not business majors may pursue one of the Management minors to complement their major in another field, but will need to make sure they have taken certain introductory business courses (see note below). Minors available within the Management major are:

- Global Logistics and Supply Chain Management (p. 264)
- Human Resource Management (p. 264)
- International Management (p. 264)
- Operations Management (p. 265)

Note: Non-business majors must take MGT 101 and ECO 255 (or its equivalent) or MAT 105 (or its equivalent) prior to beginning some of the minors.

MANAGEMENT MINOR (FOR NON-BUSINESS MAJORS)

- Management Minor (for Non-Business Majors) (p. 265)

MINOR IN INDUSTRIAL/ ORGANIZATIONAL PSYCHOLOGY

This interdisciplinary program, which is open to management majors, helps students to understand the factors that affect human behavior in the

workplace. The program covers a mix of management and psychology courses. For additional information, speak with a departmental advisor and review the course requirements listed on the page below.

- Industrial/Organizational Psychology Minor (p. 218)

MGT 101 Introduction to Management 3 Credits

Overview of the managerial functions and processes, including planning, organizing, leading and controlling, addressed from behavioral, economic, historical, and other perspectives.

Offered: fall & spring.

MGT 325 Operations Analysis for Business 3 Credits

Production/operations management and management science. Decision areas include Operations strategy, process management, quality management, facilities layout, inventory management, aggregate planning and just-in-time systems. Problem-solving techniques include forecasting, linear programming and decision analysis. This is NOT a MGT elective.

Prerequisite: MAT 106 or equivalent (or permission of the instructor).

Offered: fall & spring.

MGT 334 Strategic Sourcing 3 Credits

This course builds upon the operations management principles discovered in Operations Management and extends them to strategic sourcing and its role in global supply chain management. Strategies, concepts, and terminology pertinent to the study of strategic sourcing will be discussed. Topics to be discussed include: purchasing process, purchasing policy and procedures, supply management integration, commodity strategy development, supplier evaluation and selection, supplier quality management, supply management development, worldwide sourcing, strategic cost management, tools and techniques, negotiation, contract management, law and ethics, trends, and performance measurement. Counts as a MGT elective.

Prerequisite: MGT 325 or MGT 336.

Offered: occasionally.

MGT 335 Management Science 3 Credits

Introduction to a variety of management science tools and applications including linear programming, forecasting, decision analysis and project management. Quantitative modeling of decision-making problems, with an emphasis on interpretation of results.

Prerequisite: ECO 255.

Offered: fall & spring.

MGT 336 Production/Operations Management 3 Credits

The objective of the course is to address how firms manage processes that create goods and/or services and add value for the customer. Decision areas include operations strategy, types of processes, product/ service design, facilities layout, inventory management, aggregate planning, just-in-time systems and supply chain management.

Prerequisite: MGT 335 (or concurrent registration).

Offered: fall & spring.

MGT 350 Strategic Sustainable Development 3 Credits

Sustainable development has moved from 'doing good' to 'good business'. Organizations are realizing that sustainable development can have a positive strategic impact on their performance and that a strong business case can be made for such initiatives. This course will examine current issues and trends in sustainable development and their impact on strategy. Counts as a MGT elective.

Offered: occasionally.

MGT 360 Organizational Behavior 3 Credits

Organizational functioning at the individual, group, and system levels. Topics include social perception, communications, leadership and motivation, and organization design. Course includes experiential practice of related managerial skills.

Prerequisite: MGT 101 & sophomore standing.

Offered: fall.

MGT 364 Human Resources Management 3 Credits

Focuses on a firm's human-resources management activities. Topics include contemporary approaches to strategy, staffing, training & development, performance evaluation, compensation and labor and employee relations.

Prerequisite: MGT 101 & junior standing.

Offered: spring.

MGT 367 Employee and Labor Relations 3 Credits

Understanding power relationships in the world of work. Formal relationships between management and unions representing employees.

Topics include labor history, negotiating, labor/management relations including adversarial as well as labor/management collaboration and managing grievances. Some emphasis on skill development. Counts as a MGT elective.

Prerequisite: MGT 360 & junior standing.

Offered: occasionally.

MGT 370 Managerial Environment 3 Credits

Managing interplay between business and society, including political, economic, social, legal, international, and ethical environments. Role of market, law, self in control of business, cases, and issues.

Prerequisite: MGT 101 & senior standing.

Offered: fall & spring.

MGT 380 International Business Seminar 3 Credits

This course offers short-term seminars in Europe or China, either in the winter between the fall and spring semesters or in the summer. Winter trips are typically two-and-one-half weeks and summer trips are typically three weeks. The seminars give exposure to the international business environment and to business practices outside of the U.S. There are readings, discussions, and a substantial paper required. Depending on the specific seminar the costs range from approximately \$4500.00 to \$7500.00 in addition to normal tuition for the 3 credit hour course. Counts as a MGT Elective.

Restriction: open to upper-level business majors and to others with instructor approval.

Offered: occasionally.

MGT 430 Sustainability and Supply Chains 3 Credits

Key approaches and issues relating to sustainable operations and supply chain management including analysis of the social and environmental impacts of supply chains, the triple bottom line (people-planet-profit), lean operations, closed-loop supply chains, design for the environment (DFE), remanufacturing, and reverse logistics. Counts as a MGT elective.

Prerequisite: MGT 101.

Offered: occasionally.

- MGT 433 Negotiation Theory and Practice** 3 Credits
Explores formal and informal ways that managers negotiate differences. The course considers negotiation with peers, supervisors, subordinates, suppliers, customers, outside agencies and others as a key managerial process and a component of effective leadership. It takes a broad view of negotiations, examining the links between effective negotiation processes and influence, communication and relationship-management. We will examine research and concepts developed in a number of academic fields, and look closely at personal skills and experiences. The course requires intense involvement in negotiation simulation exercises, and thoughtful application of theory and research. Counts as a MGT elective.
Offered: occasionally.
- MGT 436 Quality Management** 3 Credits
This course will provide an overview and understanding of quality management systems and their application to business. This will include such topics as total quality management (TQM), ISO 9000, the Malcom Baldrige Award and Six Sigma (6s). In addition, tools and techniques, and strategies used in quality management will be discussed. Counts as a MGT elective.
Prerequisite: MGT 325 or MGT 336.
Offered: occasionally.
- MGT 437 Project Management** 3 Credits
Introduction to the principles and techniques employed by project managers. Focus on entire project life cycle. Critical issues such as time, cost and performance parameters analyzed from organizational and resource management perspectives. Counts as a MGT elective.
Prerequisite: MGT 325 or MGT 335.
Offered: occasionally.
- MGT 438 Entry Strategies in Emerging Markets** 3 Credits
This course examines global corporate entrepreneurship and the process through which established companies identify, launch, and manage the entry of existing products into geographic markets where the companies do not currently compete. We will also look at "emerging giants"? -- entrepreneurial firms in emerging markets that have grown to become multinationals. The course examines the differences between emerging markets and mature markets, as well as differences among emerging markets. The objective is to understand how these issues affect business opportunities in different emerging markets and why these efforts often fail. Counts as a MGT elective.
Prerequisite: ECO 101, ECO 102, & MGT 101.
Offered: occasionally.
- MGT 439 Special Topics in Operations Planning and Control** 3 Credits
Series of topics designed to target the professional certification examinations in supply chain management conducted by APICS - The Association of Operations Managements. Counts as a MGT elective.
Prerequisite: MGT 336.
Offered: occasionally.
- MGT 440 Global Supply Chain Management** 3 Credits
This course examines procurement and outsourcing strategies, network configuration, inventory management, supply chain integration, strategic alliances, international issues, coordinated product and supply chain design, demand forecasting, ERP systems, quality and JIT issues and performance measurement in a global supply chain. Counts as a MGT elective.
Prerequisite: MGT 325 or MGT 336.
Offered: every fall.
- MGT 446 Managerial Policy/Strategy** 3 Credits
Business students' capstone course. Integration of all business disciplines into discussion of goals, strategies, policies, planning, and evaluation. Cases provide decision-making experience.
Restriction: must be taken in last semester of senior year.
Offered: fall & spring.
- MGT 460 Ethical Power and Influence for Leaders** 3 Credits
Power and influence permeate our everyday lives and are important processes within organizations. Whether it be a company you founded, one you might be working with, or a company you work for, it is vital to understand how power and influence can be used to get things done even if there are barriers in your way. Technical expertise is important, but understanding how to achieve buy-in for your initiatives and goals is vital to your success. This course is about understanding power and influence and learning to use them effectively to achieve your goals. Through self-assessments, you will come to understand your own beliefs and tendencies regarding power and influence. Using this as a starting point, conceptual models are explored to give you real-world approaches in how to use ethical power and influence to become effective leaders. Counts as a MGT elective.
Prerequisite: MGT 101 or permission of instructor.
Offered: every spring beginning spring 2018.
- MGT 472 Comparative Management Systems** 3 Credits
International business emphasizing differences in systems. Context and traditions in different countries and regions: social, political, governmental, business, labor, ethical, cultural analysis. Different management and business practices. Managing and doing business within and across many countries. Counts as a MGT elective.
Prerequisite: MGT 101 or permission of instructor.
Offered: spring.
- MGT 475 Doing Business in Latin America** 3 Credits
This course is designed to provide an introduction into the Latin American business environment and its impact on management practices. Latin America is a region of resource-rich, with rapidly developing economies with enormous potential for business. Some Latin American countries have experienced, and still are undergoing, drastic political and economic transformation. This course will help students understand the opportunities and business potential as well as risks and barriers of doing business in Latin American countries. This course uses cases that focus on managerial aspects relevant to investment, risk management, and Latin America cultural issues.
Offered: occasionally.
- MGT 492 Internship in Global Supply Chain Management** 3 Credits
All for-credit internships require non-routine job experience that links academic concepts with practical experience. Involve supervision by faculty and student demonstration of academic value through papers and reports. Enrollment subject to meeting minimum GPA requirement.
Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.
Offered: fall & spring.
- MGT 493 Internship in Human Resource Management** 3 Credits
All for-credit internships require non-routine job experience that links academic concepts with practical experience. Involve supervision by faculty and student demonstration of academic value through papers and reports. Enrollment subject to meeting minimum GPA requirement.
Prerequisite: student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair, & associate dean.
Offered: fall & spring.

MGT 494 Operations Management Internship 3 Credits

Internships require an application and approval by the associate dean.

Prerequisite: student must complete a WSB Internship Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

MGT 496 Management Internship 3 Credits

All for-credit internships require non-routine job experience that links academic concepts with practical experience. Involve supervision by faculty and student demonstration of academic value through papers and reports. Enrollment subject to meeting minimum GPA requirement.

Prerequisite: student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair, & associate dean.

Offered: fall & spring.

MGT 499 Management Independent Study 6 Credits

Counts as an MGT elective. Independent studies require an application and approval by the associate dean.

Prerequisite: student must complete a WSB Independent Study Application Form and obtain the approval of a faculty supervisor, department chair, & the associate dean.

Offered: fall & spring.

Global Logistics and Supply Chain Management (GLSCM) Minor

Effective Supply Chain Management requires the integrated management of the set of value-added activities from product development through material procurement from vendors and manufacturing and distribution of the good to the final customer. Global Logistics is one of the sectors designated by the State of New York as critical to the economic development of Western New York.

MGT 325 or MGT 336 are prerequisites for many of the elective courses and should be completed by the end of the junior year.

Required Courses

MKT 201	Principles of Marketing	3
MGT 336	Production/Operations Management (Management Majors) ¹	3
or MGT 325	Operations Analysis for Business	
MGT 440	Global Supply Chain Management ²	3
or MKT 478	Global Logistics	

Minor Elective Courses

Select two of the following:		6
MGT 430	Sustainability and Supply Chains	
MGT 334	Strategic Sourcing	
MGT 440	Global Supply Chain Management ²	
or MKT 478	Global Logistics	
MGT 475	Doing Business in Latin America (or some other "Doing Business in..." course offered by the business school.)	
ACC 307	Accounting Information Systems	
ACC 452	Enterprise Systems	
MGT 492	Internship in Global Supply Chain Management	

Total Credits 15

¹ Management majors complete MGT 336; non-management majors complete MGT 325.

² Students completing both MGT 440 and MKT 478 may count one of those courses as an elective.

Students in the GLSCM minor are expected to become members of the Canisius Chapter of APICS – The Association of Operations Management. Non-business majors must take MGT 101 and ECO 255 or MAT 105 prior to beginning the program.

Human Resource Management Minor

Organizations and employees both benefit when Human Resource Management (HRM) functions are carried out professionally. There is a need for individuals who know how to match what people can bring to the organization with organizational requirements, incentives, and culture. Human Resource Management professionals work with employees to help them develop their potential. They also are responsible for monitoring and adjusting workplace policies and practices to make sure they are fair and transparent.

Students in the Human Resource Management minor are expected to become members of the Canisius Chapter of the Society for Human Resource Management (SHRM) and/or student members of the Buffalo Chapter of the Labor Employment Relations Association (LERA).

Required Courses

MGT 360	Organizational Behavior (Fall) ¹	3
MGT 364	Human Resources Management (Spring) ¹	3
MGT 460	Ethical Power and Influence for Leaders (Fall) ¹	3

Minor Elective Courses

Select three of the following (at least one in COM and one in PSY):		9
COM 204	Interpersonal Communication	
COM 302	Small Group Communication (Fall)	
COM 318	Organizational Communication (Fall)	
COM 319	Training and Development (Spring)	
COM 418	Interviewing (not offered every academic year)	
MGT 367	Employee and Labor Relations (not offered every academic year)	
MGT 493	Internship in Human Resource Management	
PSY 329	Leadership and Motivation (Spring)	
PSY 395	Assessment in the Behavioral Sciences (Fall)	

Total Credits 18

¹ For non-business majors, MGT 101 can be waived. Alternatively, many non-business majors add a business management minor with ease. Please email the faculty member teaching the course for the waiver.

International Management Minor

To meet the international dimension of today's business environment, this minor enables students to acquire knowledge and competence in the practice of management on the global stage.

This minor is intended for Management majors. Students pursuing the International Management minor must complete all specified courses for the Management major and use the following courses as management electives:

Required Courses

IBUS 301	Fundamentals of International Business	3
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MGT 472	Comparative Management Systems	3
Minor Electives		
Select three of the following:		9
ECO 460	International Trade	
ENT 312	International Entrepreneurship	
MGT 438	Entry Strategies in Emerging Markets	
IBUS 496	International Business Internship	
MGT 440	Global Supply Chain Management	
MGT 475	Doing Business in Latin America	
MKT 478	Global Logistics	
Total Credits		15

Students in this minor are encouraged to seriously consider taking advantage of one of the college’s study-abroad opportunities.

Management Minor (for Non-Business Majors)

The Business Management minor provides a basic understanding of what it takes to organize and manage complex organizations in the for-profit and not-for-profit sectors. The coursework focuses on achieving results through effective management and leadership. Students have an opportunity to work with instructors who have professional backgrounds in business and to experience a project team environment.

To complete the business management minor, students must complete:

Required Courses

MGT 101	Introduction to Management	3
MGT 325	Operations Analysis for Business	3

Select one of the following:

- ECO 255 Business Statistics I (or the equivalent)
- or MAT 105 Finite Mathematics

Select one of the following:

- MGT 370 Managerial Environment (with permission of instructor)
- or PHI 242 Ethical Issues in Business

Select one of the following: 3

- MGT 360 Organizational Behavior (Fall)
- MGT 364 Human Resources Management (Spring)

Electives

Select two of the following (or other business courses approved by the chair of the Management Department): 6

- ENT 201 Introduction to Entrepreneurship (Fall)
- ENT 314 Social Entrepreneurship and Sustainability (Justice attribute) (Spring)
- IBUS 301 Fundamentals of International Business (Fall)
- MGT 360 Organizational Behavior (whichever not taken for the above required 5 courses)
- or MGT 364 Human Resources Management
- MGT 367 Employee and Labor Relations
- MGT 380 International Business Seminar
- MGT 430 Sustainability and Supply Chains
- MGT 436 Quality Management
- MGT 437 Project Management

MGT 440	Global Supply Chain Management	
MGT 460	Ethical Power and Influence for Leaders (Fall)	
MGT 472	Comparative Management Systems	
MGT 475	Doing Business in Latin America	
MGT 496	Management Internship	
MKT 201	Principles of Marketing	
Total Credits		15

No more than 8 courses in the Wehle School of Business may be counted toward the Management minor.

Though it is not required, students may want to choose their electives in the Management minor thematically. For example:

Process perspective on management:

MGT 436	Quality Management	3
MGT 437	Project Management	3
MGT 440	Global Supply Chain Management	3

People perspective on management:

MGT 360	Organizational Behavior	3
or MGT 364	Human Resources Management	
MGT 367	Employee and Labor Relations	3
MGT 460	Ethical Power and Influence for Leaders	3

International perspective on management:

IBUS 301	Fundamentals of International Business	3
MGT 380	International Business Seminar	3
MGT 472	Comparative Management Systems	3
MGT 475	Doing Business in Latin America	3

Operations Management Minor

In a time of constant technological change, managers will be increasingly called upon to manage new products, processes and systems. In addition to providing a fundamental understanding of the field, this track helps students prepare for the six professional certification examinations of the Association of Operations Management (APICS). APICS certification should significantly improve a student’s employment prospects.

Required Courses

MGT 101	Introduction to Management	3
ECO 255	Business Statistics I (or equivalent)	3
MGT 336	Production/Operations Management ¹	3
or MGT 325	Operations Analysis for Business	

Elective Courses

Select three of the following:		9
MGT 436	Quality Management	
MGT 437	Project Management	
MGT 439	Special Topics in Operations Planning and Control	
MGT 440	Global Supply Chain Management	
MGT 494	Operations Management Internship	

Total Credits 18

¹ Management majors complete MGT 336; non-management majors complete MGT 325.

MGT 325 or MGT 336 are prerequisites for many of the elective courses in this minor and should be completed by the end of the junior year.

Students in the Operations Management minor are expected to become student members of the Canisius Chapter of APICS – The Association for Operations Management. Non-business majors must take MGT 101 and ECO 255 or MAT 105 prior to beginning the program.

Marketing

Chair: Edward J. Garrity, PhD (through Fall 2016), Gregory R. Wood (beginning Spring 2017)

INTRODUCTION

Marketing is a thrilling and dynamic discipline that helps organizations and individuals become successful by building relationships with customers and other stakeholders and creating products and services that are valued by customers. Every year excitement comes from new product launches, popular advertising campaigns, social media and innovative approaches to doing business in traditional industries. Marketing is global, fast-paced and rewarding. Marketing offers students the opportunity for an exciting career anywhere in the world. Marketing positions are available in all types of global industries ranging from financial services and health care to high technology and telecommunications. The marketing major is designed for students who want a balanced career that rewards both creativity and the ability to achieve strategic objectives.

Marketing positions are available in a variety of consumer, industrial and institutional market areas, including such non-business fields as health care, government administration and cultural development. The marketing program is designed for those who wish to pursue careers in international marketing, brand and product management, global retailing, e-tailing and distribution, marketing research, fashion merchandising, electronic and Internet marketing, sales and sales management.

The marketing curriculum is designed to help students achieve a number of important learning goals (see Learning Goal section below). The faculty annually conduct assessments to determine how well students are progressing toward the achievement of these goals. A process of continuous quality improvement based on these assessments is used to make decisions about curriculum, instructional methods, and the expected goals and objectives. This process is responsible for helping Canisius College maintain a marketing program worthy of national recognition and accreditation by the most well respected professional and academic accrediting organizations in the world. For a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities please go to the Marketing Program webpage (<https://www.canisius.edu/academics/programs/marketing>).

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall GPA to graduate with a degree in Marketing. All students must complete a minimum of 120 credit hours to graduate.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may

be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

FASHION INSTITUTE OF TECHNOLOGY

This program combines professional fashion-related education with marketing courses to provide a concentration for students interested in a career in the fashion industry. Students accepted into the program typically spend their senior year in New York City at the Fashion Institute of Technology completing practical coursework in fashion marketing and merchandising leading to an Associates Degree. Students in the program satisfy their Bachelor of Science degree in Marketing using a modified curriculum and therefore should consult with the program director early in their college career (freshman or first semester sophomore year). For further information, contact Dr. Gregory Wood, the F.I.T. program director.

MAJOR EXPERIENCES

All students are strongly encouraged to become involved in the Canisius College American Marketing Association (CCAMA) beginning in their freshman year. This organization offers important extra-curricular programs designed to connect students with the business community and help them develop a greater understanding of how marketing concepts are applied in the business world. Participation in this organization is an essential part of your preparation for professional life. Connect with CCAMA on Facebook (<https://www.facebook.com/CanisiusAMA>).

CAREER PREPARATION

All marketing majors are expected to begin planning for their business careers as early as the freshman year. This planning process typically involves taking advantage of the career services offered by the Griff Center for Academic Engagement located in Old Main 016. These services include assessment tools for identifying attractive careers, resources for researching and exploring different careers, instruction in how to utilize various online tools for conducting a job search, preparation of resumes, interview skills training and other professional development services. The Griff Center staff offers a variety of workshops and seminars as well as providing one-on-one counseling and training to assist students preparing for the world of work. Finally, the Griff Center is the primary point of contact for employers seeking to hire students for internships and full-time jobs. Therefore, it is in students' best interest to work closely with the Griff Center throughout their college years to prepare for their future career.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

The department offers minors in Information Systems (p. 269) and Computer Forensics (p. 126). More detailed information about these programs can be found by clicking the Minors tab at the top of this page.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Business Core

Required courses for all business majors (p. 235) 49-51

Marketing Major Requirements

MKT 320	Consumer Behavior	3
MKT 331	Fundamentals of Marketing Research	3
MKT 350	Digital Marketing	3
MKT 375	International Marketing	3
MKT 401	Cases in Marketing Management	3

Elective Requirements

Marketing Electives (2 Courses) 6

Total Credits 70-72

ADDITIONAL INFORMATION ABOUT THE MARKETING CURRICULUM

Cases in Marketing Management (MKT 401) is the capstone course in marketing and requires senior standing. It is also presumed that students will have completed all other required marketing courses prior to taking MKT 401. This course is not a substitute for the Core Capstone course that is a requirement of the College Core Curriculum. Digital Marketing (MKT 350) is a new required course in the program for all students who enter the college in the fall of 2015 (it was previously numbered MKT450). International Marketing (MKT 375) was previously numbered MKT475.

MAJOR ELECTIVES

The curriculum for marketing majors is designed to give students a breadth of knowledge in a variety of business functions as well as a depth of understanding in traditional marketing areas. Marketing electives can be used by students to pursue specific topics based on their interests or career

aspirations. Marketing majors are required to take two (2) elective courses (6 credit hours) in marketing. Some courses offered by other programs may be used as marketing electives. Please consult your academic advisor for details.

ADDITIONAL COURSE CONSIDERATIONS

Internships qualifying for three hours of academic credit are available to upper-division students majoring in marketing. These involve a work-and-study situation with faculty supervision. Many are paid. Students desiring internships for credit must meet certain departmental requirements. For further information, contact the department chair.

RECOMMENDED SEMESTER SCHEDULE FOR MARKETING MAJOR

Freshman

Fall	Spring
FYS 101	ENG 101
Select one of the following:	MAT 106 (or A&S elective if MAT 109, MAT 111 or MAT 115 was taken in the fall.)
MAT 105 or MAT 109, MAT 111 or MAT 115	PHI 101
RST 101	ECO 102
ECO 101	MGT 101
ISB 101	

Sophomore

Fall	Spring
MKT 201 ¹	FIN 201
ACC 201	ACC 202
History Field 4	Arts Field 3
ECO 255	ECO 256
Business International Requirement	Business International Requirement

Junior

Fall	Spring
MKT 320 ²	MKT 331 ³
MGT 325	MKT 375 ³
Religious Studies Field 1	MGT 370
Science Field 6	Philosophy Field 2 (Ethics required)
MKT 350 ²	A & S Elective

Senior

Fall	Spring
MKT 401 ⁴	MGT 446
MKT Elective	MKT Elective
A & S Elective	A & S Elective
A & S Elective	Free Elective
Core Capstone	Free Elective

¹ Students are strongly encouraged to complete MKT 201 during their sophomore year since it is a prerequisite for required marketing courses taken in the junior and senior year. Failure to complete MKT 201 during the sophomore year may delay your graduation date.

² Consumer Behavior (MKT 320) and Digital Marketing (MKT 350) are only offered during the fall semester. Students are strongly encouraged to take these courses during the fall of their junior year to avoid a delay in their graduation date.

³ Marketing Research (MKT 331) and International Marketing (MKT 375) are only offered during the spring semester. Students are strongly encouraged to take these courses during the spring of their junior year to avoid delays in their graduation date.

⁴ Cases in Marketing Management (MKT 401) is the capstone course in the marketing program and is only offered during the fall semester. Students are strongly encouraged to complete all other required marketing courses prior to their senior year. In addition, students are strongly encouraged to take MKT 401 during the fall of their senior year to avoid delays in their graduation date.

Note: All students must complete a total of 60 hours of Arts and Science courses. We strongly recommend that students run a Griff Audit to check for this and any other additional requirements.

LEARNING GOALS & OBJECTIVES

Student Learning Goal 1

Marketing Majors will demonstrate knowledge of the principles of marketing.

Students will:

- Objective A: Identify the elements of the marketing mix and demonstrate knowledge about how they provide value to the end user;
- Objective B: Identify the elements of the promotional mix and demonstrate knowledge of their role in marketing;
- Objective C: Identify the stages of the product lifecycle and demonstrate knowledge of how marketing activities change as products move across the different stages.

Student Learning Goal 2

Marketing Majors will demonstrate an understanding of quantitative marketing techniques.

Students will:

- Objective A: Demonstrate skill in performing pricing calculations;
- Objective B: Analyze marketing research data and communicate its results;
- Objective C: Demonstrate skill in deriving marketing insights from analyses of data and facts.

Student Learning Goal 3

Students demonstrate an understanding of domestic buyer behavior.

Students will:

- Objective A: Demonstrate knowledge of learning processes buyers go through in purchase decisions;
- Objective B: Students will demonstrate they know how to apply knowledge about differences between buyers on culture, perceptions, preferences and behaviors for domestic marketing decisions.

Student Learning Goal 4

Students demonstrate an understanding of international marketing.

Students will:

- Objective A: Demonstrate knowledge of the behaviors and influences on behavior for foreign buyers;

- Objective B: Demonstrate knowledge about the different market environments found in foreign countries;
- Objective C: Demonstrate understanding regarding how to adapt domestic marketing programs to the global market.

Student Learning Goal 5

Students demonstrate the ability to solve and communicate solutions to applied marketing problems.

Students will:

- Objective A: Demonstrate the ability to create solutions to marketing situations that require multi-disciplinary integration;
- Objective B: Demonstrate an ability to critically evaluate marketing programs and their performance.

Students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found in the Academic Curricula section of the catalog. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. Students must complete the appropriate minor request form.

- Information Systems Minor

- The Inter-Disciplinary Minor in Computer Forensics (p. 126) (co-administered with the Criminal Justice Program)

MKT 201 Principles of Marketing

3 Credits

Introduction to the concepts, issues and opportunities associated with marketing management. Marketing strategy, buyer behavior, new product development, product management, price, promotion and channel decisions within context of overall environment and the cornerstones of this course. Offered: every fall & spring.

MKT 320 Consumer Behavior

3 Credits

Application of concepts drawn from the behavioral sciences (i.e., anthropology, sociology and psychology) to provide insight into consumer decision-making and buyer behavior.

Prerequisite: MKT 201 or permission of instructor.

Offered: every fall.

MKT 331 Fundamentals of Marketing Research

3 Credits

Analyzes various techniques for obtaining marketing intelligence for top-level decision-making. Emphasizes marketing research methodologies and evaluation of data from primary and secondary sources.

Prerequisite: MKT 201, ISB 101, ECO 255, & ECO 256.

Offered: every spring.

MKT 350 Digital Marketing

3 Credits

This course aims to provide students with insight on how modern industry is adopting new emerging media and technologies as marketing tools. Many innovative and evolutionary technologies/media will be introduced, such as blogs, mobile media, in game advertising, virtual reality, hologram, touchscreen, social media, information kiosk in retail setting, including evolved formats of traditional media (e.g., 3-D TV, HD radio, and digital outdoor media). Formerly MKT 450.

Prerequisite: MKT 201.

MKT 370 Special Topics in Digital Marketing and Social Media

3 Credits

Exact topics to be covered depend on recent advances and applications in digital marketing and social media.

Prerequisite: MKT 201.

Offered: occasionally in fall.

MKT 371 SpecTop in DM:Mkt Data Analyti 3 Credits

Use of software tools such as Excel, Power BI, Tableau, to analyze marketing data and make informed decisions.

Prerequisite: MKT 201.

Offered: occasionally in fall.

MKT 375 International Marketing 3 Credits

Issues involved in marketing products in global markets. The focus is on identifying opportunities in world markets and adapting strategies to fit specific national market needs. Formerly MKT 475.

Prerequisite: MKT 201 or permission of instructor.

Fulfills College Core: Global Awareness

Offered: spring.

MKT 397 Search Marketing: SEO & PPC 3 Credits

Search Engine Marketing (SEM) has become one of the most important marketing strategies for business organizations. SEM involves a variety of techniques designed to increase a company's visibility on popular search engines like Google, Yahoo and Bing. The course will cover Search Engine Optimization (SEO) strategies involving website development and web analytics as well as Pay-Per-Click (PPC) strategies using advertising programs like Google AdWords. As companies increasingly compete to drive customers to their websites, the skills covered in the course are becoming essential for modern marketing professionals and web designers.

Prerequisite: MKT 201.

Offered: occasionally in spring.

MKT 401 Cases in Marketing Management 3 Credits

Case analysis is used to apply advanced practices and policies concerning product, price, promotion and supply chain marketing to marketing decision making.

Prerequisite: FIN 201, ACC 201, ACC 202, MGT 325 (or either MGT 335 or MGT 336), MKT 201, & MKT 320.

Offered: every fall.

MKT 478 Global Logistics 3 Credits

This course is an introduction to global logistics and the transportation aspects of the distribution of goods. The advantages and disadvantages of the different modes of transportation and their impact on business decisions are explored in detail. Counts as a Marketing elective.

Prerequisite: MKT 201 & either MGT 325 or MGT 336.

MKT 496 Marketing Internship 1-6 Credits

All for-credit internships require non-routine job experience that links academic concepts with practical experience. Involve supervision by faculty and student demonstration of academic value through papers and reports.

Prerequisite: student must complete a WSB Internship Application and obtain the approval of a faculty supervisor, department chair, & associate dean.

MKT 497 Fashion Industry Studies I 15 Credits

This course is for students in the Fashion Institute of Technology Program and attending F.I.T. during the fall semester.

Prerequisite: approval of chair or FIT coordinator.

MKT 498 FIT Internship II 15 Credits

This course is for students in the Fashion Institute of Technology Program and attending F.I.T. during the spring semester.

Prerequisite: approval of chair or FIT coordinator.

MKT 499 Marketing Independent Study/Research 3 Credits

Study and work with a faculty supervisor. Project to be determined by faculty agreement. Independent studies require an application and approval by the associate dean.

Prerequisite: student must complete a WSB Independent Study Application and obtain permission of a faculty supervisor, department chair, & the associate dean.

Information Systems Minor

This minor is designed to enhance students' competitiveness in the job market by developing computer and data analytic skills that are of growing importance in a broad range of careers and industries.

Five courses are required for this minor.

ISB 101	Management Technology	3
ISB 205	Data Analytics Intro	3
ISB 340	Database Management Systems	3
Two Information Systems (ISB) Electives		6
Students may use any ISB elective (except internship, ISB 496), examples include ISB 455, ISB 460 or ISB 470 to fulfill the two elective courses		
Total Credits		15

Note: Admission to the Information Systems major was closed to new students at the end of the summer 2015 semester. Students who are currently Information Systems majors will be allowed to complete the program. Students interested in careers in Information Systems are encouraged to consider this minor and to consult with the department chair for advice regarding courses and extra-curricular activities that will prepare students for jobs in this field.

SCHOOL OF EDUCATION AND HUMAN SERVICES

Jeffrey Lindauer, Ph.D., Dean; Shawn O'Rourke, Ph.D., Associate Dean, Certification Officer; Nancy Wallace, Ph.D., Director of School and Community Partnerships; Laura Moeller, Data and Credential Specialist.

MISSION STATEMENT

The faculty of the School of Education and Human Services (SEHS), in concert with our candidates, school/community partners, alumni, and the community, seek to prepare highly effective, socially committed professionals who value the Jesuit traditions demonstrated through their own *cura personalis*, work towards social justice, and leadership through service. The mission of the unit is to prepare professionals who possess content, pedagogical, and professional **knowledge**; use their gifts in the **service** of others; and demonstrate **professionalism** and **leadership** in their field.

ACADEMIC PROGRAMS

All teacher preparation programs in the School of Education and Human Services are accredited by the Council for the Accreditation of Educator Preparation (CAEP), formerly the National Council for the Accreditation of Teacher Education (NCATE). Specific accredited programs include Athletic Training by the Commission on Accreditation of Athletic Training Education (CAATE), Counseling and Human Services by the Council for Accreditation of Counseling and Related Educational Programs (CACREP), and Deaf Education by the Council on Education for the Deaf (CED). All programs are registered and approved by the New York State Education Department.

The School of Education and Human Services offers curricula leading to undergraduate degrees in a number of areas.

The Teacher Education Department offers undergraduate degree/certification programs in childhood which include: early childhood education (birth through grade 2); childhood education (grades 1 through 6); a dual certification program in early childhood/childhood education (birth through grade 6); and a dual certification program in students with disabilities / childhood education (grades 1 through 6). Each of these programs require candidates to select an academic concentration in one of nine disciplines: English, mathematics, biology, chemistry, physics, social studies, French, German, Spanish, music or social justice. Candidates enrolled in childhood education programs may elect to take two additional courses in middle childhood education and apply for an extension to teach in grades 7 through 9 for all concentrations except social justice, science, and music.

Undergraduate degree programs in adolescence education lead to teacher certification (grades 7 through 12) in one of nine academic disciplines: biology, chemistry, physics, English, mathematics, social studies, French, German and Spanish. Candidates enrolled in adolescence education programs may elect to take two additional courses in middle childhood education and apply for an extension to teach in grades 5 and 6.

The Department of Kinesiology offers undergraduate majors in athletic training, health and wellness, physical education/health, physical education sports studies, and sport management. Initial teacher certification programs are available in physical education, and a dual certification program in physical and health education.

A Professional and Technical Studies undergraduate degree is also offered through the Office of Professional Studies.

The School of Education and Human Services offers a variety of master's degrees in the departments of Counseling and Human Services (mental health and school counseling), Graduate Education and Leadership (college student personnel administration, differentiated instruction, deaf education, educational administration and leadership, educational technologies and emerging media, literacy, and TESOL), Kinesiology (physical education and sport administration), Professional Studies (applied nutrition, community and school health, health and human performance, respiratory care and health information technology), and Teacher Education (adolescence education, childhood education, and special education). These programs are described in the Graduate Catalog.

CONCEPTUAL FRAMEWORK

Introduction

Central to our conceptual framework is a symbol of infinity, representing four interrelated and evolving characteristics: *Knowledge, Service, Professionalism, and Leadership*. These elements are situated within the overarching Ignatian vision and Jesuit educational principles. These values include:

- *Cura personalis*, concern for individuals, and desire to educate the whole person;
- *Magis*, or seeking the greater good, striving for excellence and desire to have our candidates reach one's full potential;
- Sharing one's gifts in the service for and with others in the pursuit of social justice;
- Contemplation in action that is being a reflective learner and educator striving for ethical decision-making and mindful creative solutions to today's issues in Education.

To this end, with a vision of P-16 partnership, we strive to engage our students in their chosen field of study. As stated by Rev. Peter-Hans Kolvenbach, S.J., Superior General of the Society of Jesus ([The Service of Faith and the Promotion of Justice in American Jesuit Higher Education](#), 2000), "Students, in the course of their formation, must let the gritty reality of this world into their lives, so they can learn to feel it, think about it critically, respond to its suffering and engage it constructively" (p. 8).

SERVICE

Candidates in the SEHS are provided with a variety of service opportunities to enable them to learn from populations that are ethnically, racially, culturally, religiously, and intellectually diverse. Service learning opportunities embedded in the academic program are intended to "emphasize the accomplishment of tasks which meet human needs in combination with conscious educational growth" ([Combining Service and Learning: An Introduction Kendall](#), 1990, p. 20).

Service initiatives within candidates' coursework provide them with a healthy forum of exchange among their classmates and professors. This model has been shown to increase the value of the experience for the student and enhance the relationship between the academic material and the service experience ([How Service Learning Affects Students](#), Astin, Vogelgesang, Ikeda, & Yee, 2000).

Astin, Vogelgesang, Ikeda, & Yee ([How Service Learning Affects Students](#), 2000) have demonstrated that service participation positively effects important outcome measures including GPA, critical thinking skills, a commitment to activism and the promotion of racial understanding,

leadership activities, interpersonal skills, choice of a service career, and plans to participate in service after college. Other benefits include the development of citizenship skills and a higher regard for social responsibility and diversity (Educating Tomorrow's Citizens Through Service-Learning, Keith, 1994).

Throughout their coursework, field experiences, and clinical practice candidates are encouraged to seek academic excellence for them and for their students/clients. During their programs of study, candidates engage in and promote authentic learning experiences, support the social and emotional development of students/clients, and demonstrate a commitment to social justice in environments that foster a culture of care, respect for diversity and the dignity of all.

Through careful placement in field-based practica secured in collaboration with the college and its professional development schools and other partners, our candidates learn to plan, act, reflect upon and revise curriculum and service projects. Under the guidance and mentorship of field-based professionals who model the knowledge, skills, and dispositions required to ensure equity in education, our candidates develop the skills and sensitivities necessary to promote social justice and cultivate an appreciation for diversity.

Service provides opportunities for our candidates, faculty, and community partners to actively live-out, and share the knowledge, skills, and dispositions gained in the classroom. In building relationships beyond the classroom, one can seek the greater good (*magis*) in service to others, supporting the potential, and uniqueness of people.

PROFESSIONALISM

The SEHS seeks to promote a high level of professionalism and to share a mutual commitment to achieve the objectives of all partners.

Candidates benefit from the acquisition of self-reflection as a habit of mind, continuously assessing and refining their professional practice (*The Reflective Practitioner*, Schon, 1983) as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective candidate and/or counseling instruction and assessment, ensuring that all students and/or clients have optimal opportunities to learn and grow (*Professionalism Education*, Schein, 1973).

In the context of coursework, community based research and practice, faculty model and nurture the dispositions required for candidates to develop projects, learn with and from others, form a professional network of colleagues, and assume positions of responsibility.

Bridging theory to practice, candidates are integrated into authentic environments and provided “with real responsibilities, the opportunity to make decisions and to develop skills, to analyze student needs and to adjust practices using student performance data while receiving continuous monitoring and feedback” from faculty and p-12 mentors (*Transforming teacher education through clinical practice: A national strategy to prepare effective teachers* p10, BRR). Field experience and clinical practice embedded throughout the preparation program provide opportunities for candidates to become contributing and collaborative members of learning communities, and a variety of contexts in which the candidate can develop complex analytical and practical skills (*Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*, p. 10 BRR). Candidates understand that their decisions, actions, and reactions are context dependent and student/client driven. As professionals, they involve colleagues, parents and the community in the responsible care and development of each participant.

Candidates are encouraged to embark on a lifelong commitment to their profession. They are encouraged to join professional organizations and actively participate in professional conferences and research (*Collaboration, Community, and Communication: Modes of Discourse for Teacher Research*, Donohue, 1996; *Reliving the learning: Learning from classroom talk and texts*, Patterson, 1996; *Teachers as researchers: Reflection and action*, Patterson, Santa, Short, & Smith, 1993). As professionals in their fields, Canisius College candidates will internalize the processes of reflective practice, and utilize multiple sources of information to inform educational decision-making that meets the needs of the individuals and communities in which they are engaged. Effective leaders, make these ethical choices in a spirit of cura personalis, when perhaps less socially responsible decisions might be easier.

Effective instructional planning demonstrates the candidate's ability to integrate outcome-based, state, national, and professional standards in their instruction. Assessment driven instruction is evidenced in classroom practice.

LEADERSHIP

Candidates become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community (*Effective teaching methods*, Borich, 1996). Candidates accept that, as professionals, they are responsible for the long-term social and ethical implications of their performance and decision-making. The unit recognizes that the professionals it prepares for the future must be able to effectively use technology, analyze situations, set appropriate and attainable goals, as well as plan and monitor actions that will lead to the accomplishment of these goals. They must be able to efficiently evaluate results, reflect on outcomes, and use their conclusions to improve practice. Throughout this activity candidates must maintain the standards of professional conduct (*Staff development, innovations, and institutional development*, Fullan, 1990).

Through coursework, field experiences and clinical practice, candidates learn that reform is ongoing and best accomplished by committed and well-informed practitioners (*Synthesis of research on good teaching*, Porter & Brophy, 1988). Coursework continuously presents research bases for theories and practice and develops candidates' vision of themselves as change agents responsible for contributing to the body of knowledge in their field. Those directly and indirectly involved believe that each candidate must be prepared as a leader whose professional growth is ongoing and characterized by a spirit of service, professionalism, and advocacy.

DISPOSITIONS

Dispositions are professional attitudes, values, and beliefs demonstrated through behaviors as candidates interact with peers, students/clients, families, colleagues, and communities. In addition to the fundamental beliefs in fairness and justice, the Canisius College SEHS will foster the following dispositions in its candidates:

- **Enthusiastic** – Demonstrates initiative and commitment towards the educational pursuit
- **Just** – Appreciates value for human diversity and the ideal of fairness
- **Caring** – Demonstrates an attitude of empathy, tolerance and acceptance of others
- **Ethical** – Models behavior embodied in the mission of the School and college, and shows integrity in professional practice
- **Responsible** – Demonstrates personal and professional accountability for themselves and the profession

The SEHS candidate will embody the SEHS dispositions with maturing expertise. With emphasis on the movement from theory to practice, our programs teach candidates to embrace leadership roles that influence classrooms, schools, districts, and communities.

The development and exhibition of dispositions appropriate to teaching all children is a requirement of all Canisius teacher preparation programs. Candidates who demonstrate an unwillingness or inability to act in a mature, respectful and professional manner will be referred to the departmental Candidate Concern Committee for remediation. Outcomes of the remediation plan can include but are not limited to: probationary status for student teaching, prohibited from participation in field experiences, including student teaching, and/or repeating a field experience, including student teaching.

SEHS LEARNING GOALS

SEHS students will embody the characteristics of a Canisius College graduate. Our candidates will meet the college, state, and national standards and demonstrate proficiencies articulated by their discipline.

- Learning Goal 1: Candidates will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.
- Learning Goal 2: Candidates will demonstrate professional skills and dispositions necessary for successful performance in their field.
- Learning Goal 3: Candidates will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.
- Learning Goal 4: Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.
- Learning Goal 5: Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

ADMISSION, ASSESSMENT AND CONTINUED PROGRESS FOR EDUCATION PROGRAMS

Although coursework for all teacher certification programs normally begins in the freshman year, continued registration as a major is contingent upon several assessments. Through the assessment system performance is evaluated at four transition points, providing candidates with ongoing and integrated feedback on their progress. The four major transition points are:

1. Entrance into the program
2. Prior to clinical practice
3. After clinical practice
4. Program completion

Transition to each successive level requires successful performance on all measures described at the transition point. Performance measures include outcomes based on INTASC (Interstate New Teacher Assessment and Support Consortium) principles, New York State teaching standards, the standards of specialized professional associations, and faculty expectations

of knowledge, service, leadership and professionalism. The faculty review the progress of each candidate and, if deficits are noted, a plan is developed to address and remediate any shortcomings. Candidates who consistently do not meet program expectations may be counseled out of, or dismissed from, the program.

Assessment at Transition Point 1 — Program Entrance:

- Acceptance to the college: SAT score; high school GPA

Assessment at Transition Point 2 — Prior to clinical practice:

Successful final portfolio review (specific program courses)

- Cumulative GPA of 2.5 or higher;
- Grade of C or higher in all education courses;
- Grade of C or higher in content courses for candidates seeking certification at the middle childhood or adolescence level;
- Satisfactory performance in field placements.

Assessment at Transition Point 3 — After clinical practice:

Successful final portfolio review

- Satisfactory integrated portfolio reflection;
- Cumulative GPA of 2.0 or higher;
- Grade of C or higher in all education courses;
- Grade of C or higher in content courses for candidates seeking certification at the middle childhood or adolescence level;
- Satisfactory performance in field experience II placements.

Assessment at Transition Point 4 — Program Completion:

- Cumulative GPA of 2.0 or higher
- Grade of C or higher in all education courses
- Grade of C or higher in content courses for candidates seeking certification at the middle childhood or adolescence level
- Successful completion of all program requirements

All candidates for teaching certification are required to develop a professional portfolio during their program of study. Specific common assignments from selected courses are compiled into an assessment portfolio on Taskstream through which the candidate demonstrates successful performance according to the standards of professional organizations and the Interstate New Teacher Assessment and Support Consortium (INTASC). In addition, TaskStream supports the development of a showcase portfolio for future job searches. Please refer to the Undergraduate Student Handbook and the Program Portfolio Guidelines Handbook for more information.

CERTIFICATION

To obtain initial teacher certification, candidates must complete the requirements (ie. SAVE, DASA, Child Abuse) and pass the examinations required by the New York State Education Department. The most up to date testing requirements are available on the NYSDE website (<http://www.nystce.nesinc.com>).

For the professional certificate, candidates will need additional professional development, three years teaching experience, and the completion of an

appropriate master's degree within five years. Contact the New York State Education Department (<http://catalog.canisius.edu/undergraduate/school-education-human-services/www.nysed.gov>) for additional information.

As required by the New York State Education Department, the pass rates for Canisius College on the New York State Teacher Certification Examinations can be found on the the outcomes page of the Institutional Research and Effectiveness webpage (<https://www.canisius.edu/academics/academic-affairs/institutional-research-effectiveness/outcomes>).

Educator Preparation

MISSION STATEMENT

The faculty of the School of Education and Human Services (SEHS), in concert with our candidates, school partners, alumni, and the community, seek to prepare highly effective, professional, and socially committed educators and counselors who value the Jesuit traditions demonstrated through their own *cura personalis*, work towards social justice, and leadership through service. The mission of the unit is to prepare educators who possess content, pedagogical, and professional knowledge; use their gifts in the service of others; and demonstrate professionalism and leadership in their field.

Canisius College offers undergraduate majors that lead to initial teacher certification in the areas described in the majors tab above.

- Adolescence Education (p. 280)
- Childhood Education Gr. 1-6 (p. 283)
- Early Childhood/Childhood (p. 291)
- Early Childhood Birth-Gr. 2 (p. 287)
- Physical Education (p. 295)
- Physical Education/Health (p. 300)
- Special Education Childhood (p. 305)

A minor in education can provide students with skills that will be useful when teaching in a variety of settings, including informal education. This minor is available to students in any non-education major. This minor does not lead to teacher certification.

Students must complete 6 courses for the minor (18 credit hours).

Foundations (Choose 1)	3
EDU 250 Foundations of Education	
HSV 301 Social Policies	
Human Development (Choose 1)	3
EDE 100 Human Growth and Development - Birth through Childhood	
EDS 101 Human Growth and Social Development: Adolescence	
General Skills for Teaching (Choose 2)	6
EDU 122 Technology in Education	
SPE 341 Inclusive Strategies	
EDY 306 Music, Movement and the Arts in Early Childhood Education	
EDE 121 Introduction to Literacy, Children's Literature and the Arts	
EDE 390 Cognition, Learning and Assessment - Birth through Childhood	
EDS 390 Cognition, Learning and Assessment of Adolescence	

Minor Electives (Choose 2) ¹	6
ABEC 335 Conservation Education	
PED 305 Outdoor Curriculum and Cooperative Activities	
HSV 400 Management of Human Service Agencies	
HSV 450 Research in Human Services	
Total Credits	18

¹ Students must choose at least one course from the list of electives. One elective course may be chosen from the list of foundations, human development, or general skills for teaching if that course is not being used to meet that requirement of the minor. Additional courses may be appropriate and will be approved on a case-by-case basis.

Early Childhood/Childhood (ECCH) (p. 273), Elementary Education (EDE) (p. 274), Secondary Education (EDS) (p. 274), Teacher Education (EDU) (p. 276), Early Childhood Ed (EDY) (p. 276), Health & Phys. Education (HED) (p. 277), Physical Education (PED) (p. 278), Special Education (SPE) (p. 279), Special Ed 1-6 (SPE1) (p.)

EARLY CHILDHOOD/CHILDHOOD (ECCH)

ECCH 221 Literacy I 3 Credits

Examines theories of language development and implications for practice. Strategies are presented to facilitate emergent and developing literacy skills in young children and to develop fluent readers and writers throughout the elementary years. Includes twenty pages of polished prose including a literature review, literature project and lesson plans.

Corequisite: ECCH 222.

Offered: fall.

ECCH 222 Literacy II 3 Credits

Examines effective methods for assessing children's literacy skills and for developing targeted instruction that reinforces, remediates and/or enriches literacy learning. Issues related to the literacy learning of all children, including children with disabilities and children from linguistically and culturally diverse backgrounds are examined. Research-based early intervention programs will be examined. Includes 30 hours of field experience in grades PreK-6.

Corequisite: ECCH 221.

ECCH 412 Managing the Early Childhood and Elementary Classroom 3 Credits

Develops understanding of how to build classroom communities and organize the classroom for student success. Discusses the importance of a proactive approach to prevent behavior problems and investigates a variety of classroom management strategies. Strategies for collaborating with diverse families and other professionals will be explored, including strategies for co-teaching.

ECCH 493 Student Teaching-Early Childhood/Childhood 12 Credits

Highlights knowledge, skills, and dispositions of professional educators. Two full-time 7-week placements- one in each childhood and early childhood classroom requires candidates to become the instructional leader under the supervision of cooperating teachers and college faculty.

Prerequisite: signature of chair. **Corequisite:** ECCH 494 & EDU 497.

Restriction: no other courses allowed.

ECCH 494 Capstone Seminar for Teacher Candidates 3 Credits

Complements student teaching for education majors. Includes activities that demonstrate how well teacher candidates can integrate theoretical principles and core attributes into the practical work of student teaching. Teacher candidates will complete readings, engage in classroom discussions and construct artifacts related to issues of diversity, ethics, global awareness and social justice. Each artifact will be presented and discussed in class and evaluated for content, effectiveness and illustration of specific core attributes.

Prerequisite: signature of chair. **Corequisite:** student teaching.

Fulfills College Core: Core Capstone

ECCH 499 Independent Study 3 Credits

Independent studies require an application and approval by the associate dean.

Prerequisite: signature of chair & associate dean.

ELEMENTARY EDUCATION (EDE)

EDE 100 Human Growth and Development - Birth through Childhood 3 Credits

Introduces multiple dimensions of development including influence of family, culture and society. Examines physical, cognitive, emotional and behavioral theories and emphasizes education's role in promoting wellness.

Fulfills College Core: Field 5 (Social Sciences)

EDE 121 Introduction to Literacy, Children's Literature and the Arts 3 Credits

Focuses on the uses of children's books across all curriculum areas. Multicultural literature, authors, illustrators, genres and age-appropriateness are explored. Discusses basic approaches to literacy and the use of children's books in developing literacy. Emphasizes integrating the arts into the total curriculum.

Offered: spring only.

EDE 311 Teaching Science in Elementary Schools 3 Credits

Addresses objectives, curriculum, strategies, materials and evaluation necessary for teaching science. Emphasizes content, inquiry skills, problem solving and scientific attitude highlighting the NY State Standards. Includes 20 hours of field experience in Grades 1-6.

Offered: spring only.

EDE 317 Teaching Math in Elementary Schools 3 Credits

Addresses objectives, curriculum, strategies, materials and evaluation necessary for teaching mathematical concepts. Emphasizes content, inquiry skills and problem solving highlighting the New York State Standards.

Offered: fall.

EDE 331 Teaching Social Studies in Elementary Schools 3 Credits

Addresses the objectives, curriculum, strategies, materials and evaluation necessary for teaching social studies content. Emphasizes historic, geographic, economic, political and social concepts highlighting the New York State Standards.

Offered: spring only.

EDE 390 Cognition, Learning and Assessment - Birth through Childhood 3 Credits

Investigates theories of learning and current brain research. Integrates emotion and motivation and the neurological basis for learning. Analyzes formal and informal procedures for reporting student progress.

Offered: fall.

EDE 432 Seminar in Teaching and Assessment 3 Credits

Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the childhood level. Requires 50 hours of field placement. Addresses objectives, curriculum, strategies, materials and evaluation necessary for teaching science. Emphasizes content, inquiry skills, problem solving and scientific attitude highlighting the NY State Standards. Includes 20 hours of field experience in Grades 1-6.

Fulfills College Core: Oral Communication

EDE 493 Student Teaching- Childhood 12 Credits

Highlights knowledge, skills, and dispositions of professional educators. Two full-time 7-week placements in childhood classrooms require candidates to become the instructional leader under the supervision of cooperating teachers and college faculty.

Prerequisite: signature of chair. **Corequisite:** EDU 494, EDU 497, & EDU 498. **Restriction:** must have 2.7 GPA or higher.

EDE 494 Capstone Seminar for Teacher Candidates 3 Credits

Complements student teaching for education majors. Includes activities that demonstrate how well teacher candidates can integrate theoretical principles and core attributes into the practical work of student teaching. Teacher candidates will complete readings, engage in classroom discussions and construct artifacts related to issues of diversity, ethics, global awareness and social justice. Each artifact will be presented and discussed in class and evaluated for content, effectiveness and illustration of specific core attributes.

Prerequisite: signature of chair. **Corequisite:** concurrent registration in student teaching.

Fulfills College Core: Core Capstone

EDE 499 Independent Study 1-3 Credits

Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

SECONDARY EDUCATION (EDS)

EDS 101 Human Growth and Social Development: Adolescence 3 Credits

Introduces human developmental processes and variations in the middle and high school years including physical, cognitive, social, and emotional perspectives. Effects of behavioral and cognitive processes, motivation, and diversity on student performance will be emphasized.

Fulfills College Core: Field 5 (Social Sciences)

Offered: fall.

EDS 223 Foundations of Adolescent Literacy 3 Credits

Focuses on three strands of literacy teaching for adolescent students: strategies for developing reading and writing skills in all secondary content areas, methods for reading and writing in inquiry projects, and pedagogical practices for integrating critical literacy in all secondary classrooms.

Fulfills College Core: Advanced Writing-Intensive

Offered: fall.

EDS 224 Adolescent Literacy in a New Literacies World 3 Credits

This course addresses the multiple literacies that adolescents use to make meaning in the world. The focus is on the integration, implementation and assessment of New Literacies in the content areas. Requires 20 hours of field placement.

Offered: spring only.

- EDS 360 Evaluation and Teaching Strategies** 3 Credits
Addresses instructional planning, curriculum development, formal and informal assessment methods and reflecting on one's own teaching practice. Highlights instruction modifications and various resources to enhance teaching. Requires 30 hours of field placement.
- EDS 370 Teaching Young Adolescent Literature** 3 Credits
Prepares teacher candidates to teach young adult literature to adolescents, grades 7-12. Candidates will consider what, why and how literature is currently taught and learned in middle and high school classrooms. National and state standards, curriculum and assessment, literature of diverse cultures, as well as contemporary theory and research in English Language Arts will be focal points.
- EDS 390 Cognition, Learning and Assessment of Adolescence** 3 Credits
Focuses primarily upon seminal learning theories in order to examine the dynamic nature of knowledge and how changing epistemological positions can affect teaching and learning. Addresses learning processes and the roles that language, motivation, intelligence, creativity and other social processes play in student performance. Emphasis upon instructional design, pedagogical decision making and assessment procedures and instruments. Choose the appropriate course from EDS 402, 403, 404, 405, 406:.
- EDS 402 Methods of Teaching English: Adolescence** 3 Credits
Combines theory and practice to encourage sound, research-based pedagogical strategies for the teaching of English Language Arts for middle and high school students. Focuses on available teaching materials and multiple approaches to teaching literature, writing, grammar and language development, as well as technology integration. Effective lesson planning and unit planning are emphasized.
Prerequisite: EDS 360.
Offered: spring only.
- EDS 403 Methods of Teaching Mathematics: Adolescence** 3 Credits
Combines theory and practice to encourage sound, research-based pedagogical strategies for the teaching of Mathematics for middle and high school students. Focuses on available teaching materials and multiple approaches to teaching, including technology applications. Effective lesson construction and unit planning are emphasized.
Offered: spring only.
- EDS 404 Methods of Teaching Modern Languages: Adolescence** 3 Credits
Combines theory and practice to encourage sound, research-based pedagogical strategies for the teaching of foreign languages for middle and high school students. Focuses on available teaching materials and multiple approaches to teaching the grammar, literature and culture of French, German, and Spanish-speaking countries, as well as technology integration. Effective lesson planning and unit planning are emphasized.
Prerequisite: EDS 360.
Offered: spring only.
- EDS 405 Methods of Teaching Science: Adolescence** 3 Credits
This course focuses on developing a rich intellectual life through study, reflection and practice. Students will have discussions on Philosophy of Science, the philosophy of individual science disciplines and pertinent Education Psychology theories as applied to science teaching. Current research-based science teaching techniques will be emphasized. Students will write reflection papers and use these theories and principles in classroom exercises and presentations. Requires a working knowledge of at least one science discipline.
Prerequisite: EDS 360.
Offered: spring only.
- EDS 406 Methods of Teaching Social Studies: Adolescence** 3 Credits
This course addresses the objectives, methods, curricula, materials and assessment necessary for teaching social studies at the secondary level. Students will examine topics such as teaching for democratic citizenship, authentic instruction and assessment, multicultural social studies curriculum, and technology in the social studies classroom. This course models various instructional strategies and includes practical assignments and experiences for students.
Prerequisite: EDS 360.
Offered: spring only.
- EDS 432 Applied Methods of Teaching English: Adolescence** 3 Credits
Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the adolescent level. Requires 50 hours of field experience.
Prerequisite: EDS 402.
Fulfills College Core: Oral Communication
Offered: fall only.
- EDS 433 Applied Methods of Teaching Mathematics: Adolescence** 3 Credits
Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the adolescence level. Requires 50 hours of field experience.
Prerequisite: EDS 403.
Fulfills College Core: Oral Communication
Offered: fall only.
- EDS 434 Applied Methods of Teaching Modern Languages: Adolescence** 3 Credits
Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the adolescence level. Requires 50 hours of field experience.
Prerequisite: EDS 404.
Fulfills College Core: Oral Communication
Offered: fall only.
- EDS 435 Applied Methods of Teaching Science: Adolescence** 3 Credits
Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the adolescence level. Requires 50 hours of field experience.
Prerequisite: EDS 405.
Fulfills College Core: Oral Communication
Offered: fall only.
- EDS 436 Applied Methods of Teaching Social Studies** 3 Credits
Includes practica and seminars that focus on professional reflection and topics related to teaching diverse students, authentic intellectual work, classroom management, and teaching to higher standards. Requires 50 hours of field experience.
Prerequisite: EDS 406.
Fulfills College Core: Oral Communication
Offered: fall only.

EDS 493 Supervised Student Teaching 6-12 Credits

Highlights knowledge, skills and dispositions of professional educators.

Two full-time seven-week placements in adolescent classrooms require candidates to become the instructional leader under the supervision of cooperating teachers and college faculty.

Prerequisite: minimum GPA of 2.70, minimum grade of C in each required subject area course (modern language majors must also pass oral proficiency interview), minimum grade of C in each required education course, interview. Some schools may require certain health tests. **Corequisite:** EDU 494, EDU 497, & EDU 498. **Restriction:** no other courses allowed.

EDS 494 Capstone Seminar for Adolescence Education Teacher Candidates 1-3 Credits

This seminar will be the culminating course that complements student teaching for adolescence education majors. EDS 494 will revolve around assessments of how well teacher candidates can integrate theoretical principles and core attributes into the practical work of student teaching. Teacher candidates will complete readings, engage in classroom discussions and construct artifacts that will be assessed for their integration of pedagogical knowledge with issues of diversity, ethics, global awareness and social justice. The artifacts will demonstrate how well each teacher candidate's understanding of the four core knowledge attributes is contributing to his or her development as a teacher.

Fulfills College Core: Core Capstone

EDS 499 Independent Study 3 Credits

Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

TEACHER EDUCATION (EDU)

EDU 122 Technology in Education 3 Credits

Explores applications of technology in education. Emphasizes evaluation and selection of software, high and low-tech devices, distance learning and state of the art technologies that impact teaching.

Offered: fall & spring.

EDU 250 Foundations of Education 3 Credits

Addresses social, philosophical, legal, historical, organizational, theoretical perspectives on education, including multicultural perspectives. Highlights rights and responsibilities of teachers, students and others involved in education.

Corequisite: EDU 495 & EDU 496.

Fulfills College Core: Justice

Offered: fall & spring.

EDU 410 Teaching Writing in the Schools 3 Credits

Emphasizes integrating current theories of writing into classroom curricula. Students develop their own composing abilities and strengthen their ability to teach writing in school settings. Open to all Education and Adolescence Education concentrations.

EDU 415 Grammar and Language Study for Teachers 3 Credits

Addresses instruction in English grammar for students who will be teaching English Language Arts, as well as instruction in the history and structure of the English language. The course focuses on the study of the eight parts of speech and skills required for effective sentence construction. In addition, students will be exposed to the study of the history of language and how language functions in our lives. Students will focus on how these two aspects of ELA are taught in the schools. Open to all Education and Adolescence Education concentrations.

Fulfills College Core: Advanced Writing-Intensive

EDU 495 Child Abuse Workshop 0 Credits

Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.

EDU 496 Prevention of School Violence Workshop 0 Credits

Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.

EDU 497 Dignity for All Students Act (DASA) Workshop 0 Credits

Provides six hours of training on the components of the Dignity Act, how school climate impacts students achievement and behavior, understanding diversity and multi-cultural environments, and understanding bullying, harassment and discrimination, including indicators, early warning signs, prevention and intervention and how to interact with families of victims and aggressors.

EDU 498 Student Teaching Seminar 3 Credits

Student Teaching Seminar enhances the student teaching experience through opportunities to foster professional growth and guided reflection on planning, instruction and assessment of learning. The course provides a professional learning community to assist candidates in the transition to careers in teaching.

EDU 499 Independent Study 3 Credits

An independent study requires the signature of the department chair and the associate dean. Independent studies require an application and approval by the associate dean.

Prerequisite: signature of the program director & associate dean.

EARLY CHILDHOOD ED (EDY)

EDY 208 Infant/Toddler Care and Education 3 Credits

This course utilizes developmental theory and research findings to examine issues of attachment, perception, motor skills, cognition, language, emotions and social skills in children birth through age three. An emphasis is placed on understanding children in the context of family and culture. Requires 10 hours of field placement: infant/toddler.

EDY 209 Developmentally Appropriate Curriculum in Early Childhood Classrooms 3 Credits

Emphasizes research-supported practice for enhancing children's physical, cognitive, social, emotional and behavioral development within the framework of the New York State Standards. Focuses on developmentally appropriate learning opportunities. Requires 10 hours of field placement: PreK/K.

EDY 306 Music, Movement and the Arts in Early Childhood Education 3 Credits

Emphasizes the integration of music, movement, and the arts into the curriculum in K-6 classrooms. Explores various media and materials utilized to enrich learning and stimulate children's creativity.

EDY 310 Teaching Math/Science in Early Childhood Classrooms 3 Credits

Focuses on inquiry methods, problem solving, and diagnostic teaching addressing the New York State standards. Emphasizes hands-on materials, visuals and other multi-model experiences in math/science learning in the early years. Requires 10 hours of field placement Grades 1-2.

EDY 494 Capstone Seminar for Teacher Candidates 3 Credits

Complements student teaching for education majors. Includes activities that demonstrate how well teacher candidates can integrate theoretical principles and core attributes into the practical work of student teaching. Teacher candidates will complete readings, engage in classroom discussions and construct artifacts related to issues of diversity, ethics, global awareness and social justice. Each artifact will be presented and discussed in class and evaluated for content, effectiveness and illustration of specific core attributes.

Prerequisite: signature of chair. **Corequisite:** concurrent registration in student teaching.

Fulfills College Core: Core Capstone

HEALTH & PHYS. EDUCATION (HED)

HED 115 Basic Nutrition 3 Credits

This course will address all aspects of proper nutrition. The class will address material such as macronutrients, micronutrients, daily caloric intake and portion sizes. Students will gain knowledge of nutrition through class lectures, interactive activities and peer presentations. Upon successful completion of the course, students will have a working knowledge of proper nutrition and appropriate dietary habits.

Offered: fall & spring.

HED 205 Wellness and Fitness 3 Credits

Lecture and laboratory. Skills, teaching methods, resource units, evaluative instruments, teaching aids, leading to an overall understanding of the principles of health and wellness. Focus on physical fitness testing, cardiovascular exercise, muscular strength, muscular endurance, flexibility and body composition. There is additional focus on special populations, childhood obesity and the development of a personal fitness program.

Offered: fall & spring.

HED 220 Healthy Behaviors 3 Credits

Examines health determinants and the effects on all seven dimensions of health. Assessment of personal lifestyle behaviors and factors influencing current and relevant health issues. Emphasis on personal behavior modification to practice health-enhancing behaviors and to reduce health risks. Guidelines for healthy practices related to nutrition, mental health, cancer prevention, HIV/STDs, cardiovascular disease, stress management, sexuality, physical fitness, drugs and alcohol and relationships. Establishes foundation for living healthy and productive lives.

Offered: fall & spring.

HED 321 Lifeguard, C.P.R., First Aid, WSI 3 Credits

Knowledge, skill techniques and appreciations necessary to meet certification requirements of the American Red Cross. Certification fee required for this course.

Prerequisite: department swimming test and completion of departmental recommendation. **Restriction:** must be in the undergraduate or graduate must be physical education program.

Offered: fall.

HED 325 School Health 3 Credits

Students explore the most prevalent health and safety issues of schoolaged children and youth and examines rationale for health education, theories, methods, strategies, and techniques of health education program planning. Additionally, students will plan effective comprehensive school health education programs: integration of school and community services. A mandatory 50 participation hours at a local school must be completed for a passing grade in this course.

Restriction: must be physical education or physical and health education major.

Offered: spring.

HED 326 School Health Curriculum 3 Credits

Students will practice strategies and methodologies needed for effectively teaching health education. Students will participate in 50 hours of field experience, if they have not already done so, and will analyze experiences as a process to improving instruction. Students will demonstrate their ability to plan for instruction by writing and implementing learning experiences that meet the National Health Education Standards.

Restriction: must be physical education or physical and health education major.

Offered: fall.

HED 337 Exercise Principles and Applications 3 Credits

This course will address the many aspects of fitness and exercise. Students will experience classroom lecture as well as practical experience in the weight room and other alternative exercise facilities. Students will gain experience in the proper design of exercise programs and will understand the importance of periodization as it relates to exercise. Upon successful completion of this course, the student will have a vast knowledge of the principles surrounding strength and conditioning.

Prerequisite: minimum grade of C in BIO 114 & BIO 114L.

Offered: fall & spring.

HED 361 Psychology of Sport and Mental Health 3 Credits

This course address sport psychology from a sports studies perspective incorporating interdisciplinary knowledge from the social sciences. It is an appropriate approach for many students seeking to understand the psychological processes facing athletes in a competitive environment. Considerable interest surrounds the efforts of sport psychologists to optimize the performance of those characters we call athletes - the sport heroes of our society. Superior athletic performance has long held great intrigue. Tremendous improvements in the identification and measurement of the psychological factors related to athletic performance have resulted in significant improvements in an athlete's ability to produce top level performance on a consistent basis. This course focuses on the application of these psychological principles by athletes, coaches and sport psychology consultants in what has been a quest to produce the ultimate athlete.

Fulfills College Core: Field 5 (Social Sciences)

Offered: fall & spring.

HED 425 Evolution of Disease and Illness 3 Credits

Overview of humanity's triumphs and failures in the ongoing fight against illness and disease. Explores history of disease, current health issues and trends to determine outlook for emerging health concerns of the future. Examines various models of disease to explain disease agents and route of transmission throughout the body's systems. Analysis of disease occurrence, predisposing factors, body's immune response, symptoms, prevention, treatment and control.

Offered: fall & spring.

PHYSICAL EDUCATION (PED)

PED 203 Net, Target and Fitness Activities 3 Credits

Net, Target, and Fitness Games is a content-focused physical education course that includes an emphasis on sport being a learning atmosphere for global awareness. While, the course exposes students to many common and unique sports including, volleyball, pickleball, and self-defense, it also serves to expose students to other cultures that participate in these activities. The course creates an opportunity for students to become competent in net, target and fitness skills. It also provides coinciding opportunities to gain awareness of cultural variations and regional circumstances, through the lens of a particular sport.

Fulfills College Core: Global Awareness

Offered: spring of odd-numbered years.

PED 204 Invasion Games 3 Credits

Invasion Games is a content-focused physical education course that includes an emphasis on sport being a learning atmosphere for global awareness. While, the course exposes students to many common and unique sports including soccer, basketball, and water polo, it also serves to expose students to other cultures that participate in these activities. The course creates an opportunity for students to become competent in strategies required in an 'invasive setting'. It also provides coinciding opportunities to gain awareness of cultures, and communities, and societies, through the lens of a particular sport.

Fulfills College Core: Global Awareness

Offered: fall of odd-numbered years.

PED 207 Dance and Gymnastics 3 Credits

Participation in selected dance and gymnastics forms. Students will learn appropriate organization and teaching progressions for various forms of dance and gymnastics taught in the P-12 curricula.

Restriction: must be in the undergraduate or graduate must be physical education program.

Offered: spring of even-numbered years.

PED 305 Outdoor Curriculum and Cooperative Activities 3 Credits

Philosophy, teaching methods, programming and safety management.

Activities may include initiatives, new games, problem solving, trust activities, ropes course, cycling, mountain biking, rock climbing, rappelling, cross-country skiing and others.

Offered: fall of even-numbered years.

PED 311 Movement Education and Elementary Activities 3 Credits

Conceptual bases, perceptual-motor development and practical applications of movement education. Development, implementation and integration of a physical education program; teaching strategies geared to the elementary level classroom with emphasis on New York and national learning standards in Physical Education. Field experience required.

Restriction: must be physical education or physical and health education major.

Offered: spring.

PED 351 Coaching Theory and Techniques 3 Credits

Coaching is a service activity, which can be experienced as a volunteer, as a paid part-time position or can lead to a full-time profession. The athletes we work with are children and young adults. Many participate at the 'house' league level, while others are involved with more competitive and elite programs. Winning is an important aspect of coaching, however providing a positive athletic experience is essential. Winning may take a secondary role to the development of fundamental skills in many situations. This course focuses upon the principles of effective coaching including the role of the coach, ethics and values clarification. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship.

Offered: fall.

PED 354 Adapted Physical Education 3 Credits

Designed to provide students with an exposure to education, physical education, sport and recreational programming for children with disabilities. Content focuses on variety of disabilities eligible for service under the Individuals with Disabilities Act (IDEA) and the ability to design, conduct, and assess a physical education program that is appropriate for this population. Service-Learning required.

Restriction: must be physical education or physical and health education major.

Fulfills College Core: Diversity

Offered: fall.

PED 355 Disability Sports 3 Credits

Identification of national and international sport and recreational opportunities for individuals with disabilities. Paralympics, Special Olympics, and other disability sport movements and sport classifications will be reviewed. Insight into the historical development of disability sports as well as the delivery of sport models in school and community settings will be included.

Fulfills College Core: Diversity

Offered: spring.

PED 360 Human Growth and Motor Development 3 Credits

Examination of principles of growth and developmental theory with an emphasis on factors affecting changes in movement potential of individuals.

Restriction: must be physical education or physical and health education major.

Offered: fall.

PED 365 Principles and Philosophy of Coaching 3 Credits

Coaching is a service activity, which can be experienced as a volunteer, as a paid part-time position or can lead to a full-time profession. The athletes we work with are children, young adults and students. Winning is an important aspect of coaching, however providing a positive athletic experience is essential. Winning may take a secondary role to the development of fundamental skills in many situations. This course focuses upon the principles of effective coaching including the role of the coach, practice planning, leadership styles, organization and management, ethics and values clarification, goal setting, communication, career objectives, coaching burn-out and sport psychology. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship.

Restriction: KIN department majors only.

Offered: spring.

PED 371 Assessment in Physical Education 3 Credits

This course will introduce the teacher candidate to assessment and its role in the physical education profession. Topics include fitness testing, integrating physical education assessment tools, and basic statistics. In addition, there will be a focus on the evaluation of the New York State Standards, authentic assessments and SHAPE America guidelines.

Restriction: must be physical education or physical and health education major; permission of program director.

Offered: spring.

PED 372 Seminar in Kinesiology 3 Credits

The course requires students to engage in professional writing; students will be taught how to conduct and write about a given topic. All course-content will be research-based, and students will be encouraged to see the connections between the research used throughout the class and the specific topic they are reviewing for the extended writing project.

Restriction: KIN department majors only.

Fulfills College Core: Advanced Writing-Intensive

Offered: spring.

PED 380 Concepts of Teaching Sport Skills 3 Credits

The purpose of this course is to give each student an in depth exposure to and an understanding of the various motor learning principles and factors influencing the acquisition of motor skills. The central focus of the course will be directed to the learning process. Age appropriate activities and instructional guidelines will be examined. This includes the variables related to the learner, the skills to be acquired and the instructional procedures that can be used by the physical educator, coach or exercise specialist.

Restriction: must be physical education or physical and health education major.

Offered: spring.

PED 441 Teaching Methods in Physical Education 3 Credits

Development, implementation and integration of a physical education program; teaching strategies for K-12 physical education with emphasis on New York and national learning standards in Physical Education.

Prerequisite: signature of program director. **Restriction:** permission of program director.

Fulfills College Core: Oral Communication

Offered: fall.

PED 441L Teaching Practicum in Physical Education 0 Credits

The teacher candidate will train for student teaching at the K-12 school level. To successfully complete this experience the candidate will finish a series of modules designed to bridge the gap between the college classroom and the teaching setting.

Prerequisite: signature of program director. **Restriction:** permission of program director.

Offered: fall & spring.

PED 493 Student Teaching Physical Education/Health: Childhood and Adolescence 12 Credits

Seven-week student teaching experience in an elementary school, Grades 1-6, and in a high school, Grades 7-12, culminating in preparation for teacher certification. Grade: Pass/Fail. The combination of PED 493, EDU 495, EDU 496, EDU 497, and EDU 498 during the student teaching semester will count as a full semester of three courses, 15 credit hours.

Prerequisite: Completion of all other course requirements and department approval, and minimum GPA of 2.5 in all major courses. **Corequisite:** EDU 497 & EDU 498. **Restriction:** permission of program director.

Offered: fall & spring.

PED 499 Independent Study 1-3 Credits

Independent study with a Kinesiology faculty member with emphasis on research in Physical Education. Independent studies require an application and approval of the associate dean.

Prerequisite: permission of instructor, department chair, & associate dean.

Offered: occasionally.

SPECIAL EDUCATION (SPE)

SPE 100 Introduction to Special Education 3 Credits

Presents the definitions, causes, psychological and behavioral characteristics of disabilities outlined in the IDEA. Emphasizes assessment procedures, multicultural issues, family involvement and the referral process.

SPE 291 Nature and Needs of CH Students with Learning Disabilities 3 Credits

Describes the effect of mild disabilities on childhood. Focuses on collaborative strategies for parental involvement. Highlights the CSE process, placement options and instructional strategies in grades one to six. Requires 20 hours field placement.

Prerequisite: SPE 100. **Corequisite:** SPE 292.

SPE 292 Remedial Strategies in the Childhood Content Areas 3 Credits

Describes appropriate techniques and materials for instruction to students with disabilities and those at risk of failure. Emphasizes assistive technology for students in childhood classrooms across the curriculum.

Prerequisite: SPE 100. **Corequisite:** SPE 291.

SPE 311 Nature/Needs of Childhood Students with Intellectual Disabilities & Autism Spectrum Disorders 3 Credits

Describes effects of MR and other developmental disabilities on childhood. Focuses on collaborative strategies for parental involvement. Highlights instructional strategies for grades 1-6 across the continuum of services. Requires 20 hours field placement.

Prerequisite: SPE 291 & SPE 292. **Corequisite:** SPE 312.

SPE 312 Multidisciplinary Assessment and Childhood Teaching 3 Credits

Emphasizes a multidisciplinary approach to meet the assessment and learning needs of childhood students with disabilities. Explores assessment and evaluation using the New York State Standards for Severe Disabilities and the Alternative Performance Indicators.

Prerequisite: SPE 291 & SPE 292. **Corequisite:** SPE 311.

SPE 330 Nature/Needs of Childhood Students with Behavioral Disorders 3 Credits

Describes the effect of Emotional and Behavioral Disorders on children and their families. Highlights NYSED Regulations, collaboration and instructional strategies to address academic and behavioral issues. Requires 20 hours of field placement.

Prerequisite: SPE 311 & SPE 312. **Corequisite:** SPE 335.

SPE 335 Classroom Management in Childhood Classrooms 3 Credits

Discusses implications of behavior management and importance of a proactive approach to prevent behavior problems. Emphasizes appropriate classroom structure, and individual and group contingencies to support children with E/BD in grades 1-6.

Prerequisite: SPE 311 & SPE 312. **Corequisite:** SPE 330.

SPE 341 Inclusive Strategies 3 Credits

Highlights best practices in general education for students with disabilities. Illustrates current developments in special education. Emphasizes collaboration.

Fulfills College Core: Diversity

SPE 432 Seminar in Teaching and Assessment 3 Credits

Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the special education-childhood level. Requires 50 hours of field placement.

Fulfills College Core: Oral Communication

SPE 493 Supervised Student Teaching 12 Credits

Highlights knowledge, skills and dispositions of professional educators. One full-time 7-week placement in each childhood and special education-childhood classroom requires candidates to become the instructional reader under the supervision of cooperating teachers and college faculty.

Prerequisite: signature, minimum GPA of 2.70, minimum grade of C in each required education course, some schools may require certain health tests.

Corequisite: EDU 494, EDU 497, & ECCH 494.

SPE 495 Advanced Research Seminar in Autism 1-6 Credits
Advanced Research Seminar in Autism provides students with advanced clinical and research training in autism spectrum disorder (ASD). The course consists of two distinct but interrelated components including (1) classroom instruction and applied training in evidence-based treatment for children with ASD and (2) hands-on research experience during studies being conducted. Students will learn about ASD and evidence-based treatments, and participate in various studies involving high-functioning youth with ASD. Students also serve as a member of a professional research team..

SPE 499 Independent Study 3 Credits
Independent studies require an application and approval by the associate dean.

Prerequisite: permission of the instructor, department chair, & associate dean.

Adolescence Education

Chair: Michele Marable, PhD
Associate Chair: Lorrei DiCamillo, EdD

INTRODUCTION

Professional sequences in Adolescence Education give teacher candidates a thorough foundation in the many facets of modern American secondary education and a gradually increasing exposure to the realities of the classroom. A broad range of field experiences, from observation and tutoring to a full semester of student teaching, is an essential part of the curriculum. Each program also includes an integrated sequence of subject-area courses offered by one or more of the academic departments at the college. The Adolescence Education program offers nine certification programs at the Adolescence Level – grades 7 through 12. A more detailed description of the program, faculty, facilities, academic and co-curricular opportunities can be found on the program webpage (<https://www.canisius.edu/academics/programs/adolescence-education-undergraduate>).

QUALIFICATIONS

Academic criteria for endorsement and completion of the program are as follows: Students must maintain a cumulative GPA of 2.7 or higher and a grade of C or higher in content and pedagogical courses. They must achieve satisfactory performance in field placements. All candidates must complete a minimum of 120 credit hours to graduate.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

In addition, candidates will be assigned an advisor in their respective concentration area.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned

graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

The Adolescence Education Major includes the following required courses:

EDS 101	Human Growth and Social Development: Adolescence	3
EDS 223	Foundations of Adolescent Literacy	3
EDS 224	Adolescent Literacy in a New Literacies World	3
EDU 250	Foundations of Education	3
SPE 341	Inclusive Strategies	3
EDS 360	Evaluation and Teaching Strategies	3
EDS 390	Cognition, Learning and Assessment of Adolescence	3
Choose the appropriate course:		3
EDS 402	Methods of Teaching English: Adolescence	
EDS 403	Methods of Teaching Mathematics: Adolescence	
EDS 404	Methods of Teaching Modern Languages: Adolescence	
EDS 405	Methods of Teaching Science: Adolescence	
EDS 406	Methods of Teaching Social Studies: Adolescence	
Choose the appropriate course:		3
EDS 432	Applied Methods of Teaching English: Adolescence	
EDS 433	Applied Methods of Teaching Mathematics: Adolescence	
EDS 434	Applied Methods of Teaching Modern Languages: Adolescence	
EDS 435	Applied Methods of Teaching Science: Adolescence	
EDS 436	Applied Methods of Teaching Social Studies	
EDS 493	Supervised Student Teaching	12

EDS 494	Capstone Seminar for Adolescence Education Teacher Candidates	3
EDU 495	Child Abuse Workshop	0
EDU 496	Prevention of School Violence Workshop	0
EDU 497	Dignity for All Students Act (DASA) Workshop	0
EDU 498	Student Teaching Seminar	3

Total Credits		45
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MAJOR ELECTIVES

Candidates wishing to obtain an extension to teach grades 5-6 in their area of concentration must take EMC 352 and EMC 391 in addition to the courses listed above.

MAJOR EXPERIENCES

New York State requires the successful completion of at least 100 hours of field experience before student teaching. This requirement is divided up among three courses in the major program. EDS 224 has a 20 hour field experience, EDS 360 has a 30 hour field experience and EDS 432-EDS 436 (choose the appropriate course) hosts the final 50 hours. The field experience builds from participatory observation to tutoring or working with small groups to teaching a lesson and then teaching lessons from a learning segment designed by the candidate in the EDS 432-EDS 436 course.

ACADEMIC CONCENTRATION

Candidates choose from the following areas of certification: Biology, Chemistry, Physics, Mathematics, English, Social Studies, Spanish, French, or German. Required courses in these content areas are listed below:

Adolescence Biology Concentration

BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
BIO 212 & 212L	Biochemistry and Cell Biology II and Biochemistry and Cell Biology Lab II	4
BIO 408 or BIO 450	Biotechnology, Theory in Practice Molecular Biology	3-4
BIO 404	Genetics	3
Choose one of the following ecology courses		3-4
BIO 320	Field Ecology	
BIO 375	Community Ecology	
BIO 377	Freshwater Biology	
Choose one of the following microbiology or physiology courses		4
BIO 305 & 305L	Environmental and Pathogenic Microbiology and Environmental and Pathogenic Microbiology Lab	
BIO 307 & 307L	Microbiology and Microbiology Laboratory	
BIO 340 & 340L	Physiology and Physiology Laboratory	
MAT 111	Calculus I	4
MAT 131	Statistics for Social Sciences	3
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4

PHY 201 & 201L	College Physics I and College Physics I Laboratory	4
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To Add Chemistry Certification to the Biology Certification, please add:

CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
BCH 301 & 301L	Introduction to Biochemistry and Introduction to Biochemistry Laboratory	4
CHM 301	Classical Physical Chemistry	3
CHM 381	Scientific Literature and Communication	1

Adolescence Chemistry Concentration

CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	4
CHM 227 & 227L	Organic Chemistry I and Organic Chemistry I Laboratory	4
CHM 230 & 230L	Analytical Chemistry and Analytical Chemistry Laboratory	4
CHM 301 & 301L	Classical Physical Chemistry and Classical Physical Chemistry Laboratory	4
CHM 244	Inorganic Chemistry	3
One chemistry elective with lab		4
CHM 381	Scientific Literature and Communication	1
PHY 201 & 201L	College Physics I and College Physics I Laboratory	4
PHY 202 & 202L	College Physics II and College Physics II Laboratory	4
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BCH 301 & 301L	Introduction to Biochemistry and Introduction to Biochemistry Laboratory	4
MAT 111	Calculus I	4
MAT 112	Calculus II	4

Adolescence Mathematics Concentration

MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 211	Calculus III	4
MAT 219	Linear Algebra	4
MAT 222	Differential Equations	3
MAT 230	Logic, Set Theory, and Proofs	4
MAT 301	History of Mathematics	3
MAT 311	Abstract Algebra	4
One Computer Science course		3
One Math elective		3
MAT 331	Geometry	3
MAT 351	Probability & Statistics I	3

Please note that students pursuing the Mathematics Concentration are strongly encouraged to complete a dual major with Adolescence Education and Mathematics and Statistics. To complete the dual major, students must add MAT 321; the series of MAT 380, MAT 381, and MAT 480; and one of the following: MAT 312, MAT 322, or MAT 352.

Adolescence English Concentration

ENG 299	Introduction to English Studies	3
One course in Women's Literature		3
One course in Multicultural Literature		3
One course in Global Literature		3
One course in Writing (300 level or Creative Writing)		3
ENG 322	Shakespeare I	3
or ENG 323	Shakespeare II	
One Pre-1800 British Literature course		3
One Post-1900 American Literature Course		3
One Pre-1900 American Literature course		3
EDS 370	Teaching Young Adolescent Literature	3
EDU 410	Teaching Writing in the Schools	3
Total Credits		33

Adolescence Social Studies Concentration

HIS 107	History of Modern Europe to 1815 (European History)	3
or HIS 212	Men and Ideas in History	
HIS 108	History of Modern Europe since 1815 (European History)	3
or HIS 211	Women In The Western World	
HIS 123 & HIS 124	History of the United States: The Colonial Period to Reconstruction and History of the United States: 1877 to the Present (American History)	6
HIS 300	Historical Geography (World History)	3
ECO 101 & ECO 102	Principles of Macroeconomics and Principles of Microeconomics (Economics)	6
PSC 103	The American Constitution (Political Science)	3
or PSC 104	American Political Process	
PSC 140	International Relations (Political Science)	3
or PSC 150	Comparative Government and Politics	
One Culture Class (see department for current list of courses that fulfill this requirement)		3

Please note that students pursuing the Social Studies Concentration are strongly encouraged to complete a dual major with Adolescence Education and History. To complete the dual major, students must add the following courses: HIS 382; one of HIS 211, HIS 213, or HIS 230; one of HIS 110, HIS 131, or HIS 132; and one elective at the 300-level.

Adolescence Spanish Concentration

SPA 215	Intermediate Spanish ¹	3
SPA 217	Introduction to Spanish Composition ¹	3
SPA 323	Topics in Conversation I: Peninsular Culture and Conversation	3
SPA 324	Topics in Conversation II: Latin American Culture and Civilization	3
SPA 332	Advanced Spanish Composition	3

Seven Spanish electives	21
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¹ Students who begin study at the 300-level will have the 200-level courses waived, and thus will only need 10 courses for the concentration.

Adolescence French Concentration

FRC 215	Intermediate French ¹	3
FRC 217	Intermediate French II ¹	3
FRC 323	Topics in Conversation I	3
FRC 324	French Composition through Literature	3
FRC 332	Substance and Style: Effective Writing in French	3
Seven French electives		21

¹ Students who begin study at the 300-level will have the 200-level courses waived, and thus will only need 10 courses for the concentration.

Adolescence German Concentration

GER 215	Intermediate German I ¹	3
GER 216	Intermediate German II ¹	3
GER 323	Topics in Conversation I	3
GER 324	Topics in Conversation II	3
GER 331	Substance and Style: Effective Writing in German I	3
GER 332	Substance and Style: Effective Writing in German II	3
Six German Electives		18

¹ Students who begin study at the 300-level will have the 200-level courses waived, and thus will only need 10 courses for the concentration.

LEARNING GOALS AND OBJECTIVES

Learning Goal 1 (KNOWLEDGE – Observed in Writing)

Candidates in the Teacher Education programs will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Teacher candidates will:

- Acquire knowledge of each student, and demonstrate knowledge of student development and learning to promote achievement for all students.
- Know the content they are responsible for teaching, and the pedagogical content knowledge to plan instruction that ensures growth and achievement for all students.

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)

Candidates in the Teacher Education programs will demonstrate professional skills and dispositions necessary for successful performance in their field.

Teacher candidates will:

- Demonstrate professional dispositions and implement instruction that engages and challenges all students to meet or exceed the learning standards.

Learning Goal 3 (SERVICE)

Candidates in the Teacher Education programs will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of

their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Teacher candidates will:

- Work with all students to create a dynamic learning environment that supports achievement and growth.
- Use multiple measures to assess and document student growth, evaluate instructional effectiveness, and modify instruction for diverse learners.

Learning Goal 4 (PROFESSIONALISM)

Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Teacher candidates will:

- Set informed goals and strive for continuous professional growth.

Learning Goal 5 (LEADERSHIP)

Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Teacher candidates will:

- Demonstrate professional responsibility and engage relevant stakeholders to maximize impact on student growth, development, and learning.

Childhood Education Gr. 1-6

Chair: Michele Marable, PhD

INTRODUCTION

The Childhood Education program prepares teacher candidates to teach children in Grades 1-6. Teacher candidates are required to complete major requirements that include pedagogical knowledge and methods that will prepare them to be successful as a teacher at this level. Candidates must also complete general education coursework as identified in the Canisius College Core Curriculum, but also must select a 30 credit liberal arts concentration. Candidate will have opportunities to practice in the field many times throughout their program, culminating with a 14 week student teaching experience where they are expected take over the class of a mentor teacher to hone their professional practice in preparation for their first teaching position after graduation. More information can be found on the program (<https://www.canisius.edu/academics/programs/childhood-education>) webpage (<http://www.canisius.edu/teacher-ed/childhood-ed>).

QUALIFICATIONS

Students must meet the requirements at all transition points in order to graduate with an education degree and be recommended for teacher certification.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may

be requested in the freshman year to supplement a student’s freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

EDE 100	Human Growth and Development - Birth through Childhood	3
EDE 121	Introduction to Literacy, Children's Literature and the Arts	3
EDU 122	Technology in Education	3
ECCH 221	Literacy I	3
ECCH 222	Literacy II	3
EDU 250	Foundations of Education	3
EDE 311	Teaching Science in Elementary Schools	3
EDE 317	Teaching Math in Elementary Schools	3
EDE 331	Teaching Social Studies in Elementary Schools	3
SPE 341	Inclusive Strategies	3
EDE 390	Cognition, Learning and Assessment - Birth through Childhood	3
ECCH 412	Managing the Early Childhood and Elementary Classroom	3
ECCH 494	Capstone Seminar for Teacher Candidates	3
EDE 432	Seminar in Teaching and Assessment	3
EDE 493	Student Teaching- Childhood	12
EDU 495	Child Abuse Workshop	0
EDU 496	Prevention of School Violence Workshop	0
EDU 497	Dignity for All Students Act (DASA) Workshop	0
EDU 498	Student Teaching Seminar	3
Total Credits		57

MAJOR ELECTIVES

Candidates wishing to obtain an extension to teach grades 7-9 in their area of concentration (English, Mathematics, Social Studies, Spanish, French and German) must take EMC 352 and EMC 391 in addition to the courses listed below. The Science, Music, and Social Justice concentrations do not lead to middle school certification extensions.

ADDITIONAL COURSE CONCENTRATIONS

Childhood majors need to choose one of the following academic concentrations: English, Mathematics, Music, Science, Social Studies, Social Justice, French, German or Spanish.

English Concentration

Code	Title	Credits
ENG 101	Writing about Literature	3
FYS 101	Explorations of Academic Writing and Special Topics	3
ENG 299	Introduction to English Studies	3
Two 200-level literature courses		6
One pre-1900 American Literature course		3
One pre-1800 British Literature course		3
One Shakespeare course		3
Two writing courses		6
Total Credits		30

Mathematics Concentration

Code	Title	Credits
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 219	Linear Algebra	4
MAT 230	Logic, Set Theory, and Proofs	4
MAT 311	Abstract Algebra	4
MAT 331	Geometry	3
MAT 351	Probability & Statistics I	3
Choose one of the following:		3-4
MAT 211	Calculus III	
Computer Science elective		
Choose one of the following:		3-4
MAT 222	Differential Equations	
Math elective		
Total Credits		32-34

Music Concentration

Code	Title	Credits
FAM 115	Fundamentals of Music	3
FAM 119	Masterpieces of Music	3
FAM 210	Keyboard Musicianship	3
FAM 230 & 230L	Music Theory I and Music Theory I Lab	4
FAM 240 & 240L	Music Theory II and Music Theory II Lab	4
FAM 330 & 330L	Music Theory III and Music Theory III Lab	4

One Music Literature I course	3
One Music Literature II course	3
One Music elective	3
Total Credits	30

Science Concentration

Code	Title	Credits
GEO 325	Introduction to Physical Geography	3
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112/112L	General Chemistry II	4
One physics course		3
Two science electives		6
Total Credits		32

Social Studies Concentration

Code	Title	Credits
ECO 101	Principles of Macroeconomics	3
GEO 325	Introduction to Physical Geography	3
PSC 104	American Political Process	3
HIS 107	History of Modern Europe to 1815	3
HIS 108	History of Modern Europe since 1815	3
HIS 109	History of Asia to 1800	3
HIS 123	History of the United States: The Colonial Period to Reconstruction	3
HIS 124	History of the United States: 1877 to the Present	3
HIS 254	First Peoples	3
One European or Asian/African/Latin American History elective		3
Total Credits		30

Social Justice Concentration

Code	Title	Credits
Foundations Course		3
SOC 273	Social Movements and Social Change	
Research Courses		6
SOC 342	Social Research Methods	
ANT 351	Qualitative Research Methods	
Skills Classes (choose 2)		6
COM 201	Oral Communication	
COM 204	Interpersonal Communication	
COM 302	Small Group Communication	
ECO 311	Metropolitan Economic Development and GIS	
PSY 329	Leadership and Motivation	
PSC 237	State and Local Politics	
Four electives in your Focus - either Local (Urban) or Global		12
Local (urban) Focus electives		
HIS 382	New York State History	

HSV 300	Social and Cultural Diversity
HSV 301	Social Policies ¹
HSV 302	Children, Schools, and the Community
PSC 237	State and Local Politics
SOC 111	Contemporary Social Problems ¹
SOC 340	Sociology of the City
Global Focus	
ANT 122	Sociocultural Anthropology
HIS 211	Women In The Western World
HIS 356	Twentieth Century China
HIS 358	Traditional Japan
HIS 394	Modern Middle East
PSC 241	Human Rights and Globalization
HSV 300	Social and Cultural Diversity
HSV 302	Children, Schools, and the Community
Elective	3
One course from the other focus (either Local or Global)	
Total Credits	30

¹ Students may take either HSV 301 or SOC 111 but not both.

French Concentration

Code	Title	Credits
FRC 215	Intermediate French	3
FRC 217	Intermediate French II	3
FRC 323	Topics in Conversation I	3
FRC 324	French Composition through Literature	3
FRC 332	Substance and Style: Effective Writing in French	3
Five French electives		15
Total Credits		30

German Concentration

Code	Title	Credits
GER 215	Intermediate German I	3
GER 216	Intermediate German II	3
GER 323	Topics in Conversation I	3
GER 324	Topics in Conversation II	3
GER 331	Substance and Style: Effective Writing in German I	3
GER 332	Substance and Style: Effective Writing in German II	3
Four German electives		12
Total Credits		30

Spanish Concentration

Code	Title	Credits
SPA 215	Intermediate Spanish ¹	3
SPA 217	Introduction to Spanish Composition ¹	3
SPA 323	Topics in Conversation I: Peninsular Culture and Conversation	3
SPA 324	Topics in Conversation II: Latin American Culture and Civilization	3
SPA 332	Advanced Spanish Composition	3

Five Advanced-Level Spanish Classes	15
Total Credits	30

¹ Students who begin language study at the 300-level may substitute additional electives in lieu of the intermediate (200) level courses. Thus, students still will take 10 courses for the concentration.

LEARNING GOALS AND OBJECTIVES

Learning Goal 1 (KNOWLEDGE – Observed in Writing)

Candidates in the Teacher Education programs will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Teacher candidates will:

- Acquire knowledge of each student, and demonstrate knowledge of student development and learning to promote achievement for all students.
- Know the content they are responsible for teaching, and the pedagogical content knowledge to plan instruction that ensures growth and achievement for all students.

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)

Candidates in the Teacher Education programs will demonstrate professional skills and dispositions necessary for successful performance in their field.

Teacher candidates will:

- Demonstrate professional dispositions and implement instruction that engages and challenges all students to meet or exceed the learning standards.

Learning Goal 3 (SERVICE)

Candidates in the Teacher Education programs will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Teacher candidates will:

- Work with all students to create a dynamic learning environment that supports achievement and growth.
- Use multiple measures to assess and document student growth, evaluate instructional effectiveness, and modify instruction for diverse learners.

Learning Goal 4 (PROFESSIONALISM)

Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Teacher candidates will:

- Set informed goals and strive for continuous professional growth.

Learning Goal 5 (LEADERSHIP)

Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Teacher candidates will:

- Demonstrate professional responsibility and engage relevant stakeholders to maximize impact on student growth, development, and learning.

EDU 122 Technology in Education 3 Credits

Explores applications of technology in education. Emphasizes evaluation and selection of software, high and low-tech devices, distance learning and state of the art technologies that impact teaching.

Offered: fall & spring.

EDU 250 Foundations of Education 3 Credits

Addresses social, philosophical, legal, historical, organizational, theoretical perspectives on education, including multicultural perspectives. Highlights rights and responsibilities of teachers, students and others involved in education.

Corequisite: EDU 495 & EDU 496.

Fulfills College Core: Justice

Offered: fall & spring.

EDU 495 Child Abuse Workshop 0 Credits

Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.

EDU 496 Prevention of School Violence Workshop 0 Credits

Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.

EDU 497 Dignity for All Students Act (DASA) Workshop 0 Credits

Provides six hours of training on the components of the Dignity Act, how school climate impacts students achievement and behavior, understanding diversity and multi-cultural environments, and understanding bullying, harassment and discrimination, including indicators, early warning signs, prevention and intervention and how to interact with families of victims and aggressors.

EDU 498 Student Teaching Seminar 3 Credits

Student Teaching Seminar enhances the student teaching experience through opportunities to foster professional growth and guided reflection on planning, instruction and assessment of learning. The course provides a professional learning community to assist candidates in the transition to careers in teaching.

SPE 341 Inclusive Strategies 3 Credits

Highlights best practices in general education for students with disabilities. Illustrates current developments in special education. Emphasizes collaboration.

Fulfills College Core: Diversity

EDE 100 Human Growth and Development - Birth through Childhood 3 Credits

Introduces multiple dimensions of development including influence of family, culture and society. Examines physical, cognitive, emotional and behavioral theories and emphasizes education's role in promoting wellness.

Fulfills College Core: Field 5 (Social Sciences)

EDE 121 Introduction to Literacy, Children's Literature and the Arts 3 Credits

Focuses on the uses of children's books across all curriculum areas. Multicultural literature, authors, illustrators, genres and age-appropriateness are explored. Discusses basic approaches to literacy and the use of children's books in developing literacy. Emphasizes integrating the arts into the total curriculum.

Offered: spring only.

EDE 311 Teaching Science in Elementary Schools 3 Credits

Addresses objectives, curriculum, strategies, materials and evaluation necessary for teaching science. Emphasizes content, inquiry skills, problem solving and scientific attitude highlighting the NY State Standards. Includes 20 hours of field experience in Grades 1-6.

Offered: spring only.

EDE 317 Teaching Math in Elementary Schools 3 Credits

Addresses objectives, curriculum, strategies, materials and evaluation necessary for teaching mathematical concepts. Emphasizes content, inquiry skills and problem solving highlighting the New York State Standards.

Offered: fall.

EDE 331 Teaching Social Studies in Elementary Schools 3 Credits

Addresses the objectives, curriculum, strategies, materials and evaluation necessary for teaching social studies content. Emphasizes historic, geographic, economic, political and social concepts highlighting the New York State Standards.

Offered: spring only.

EDE 390 Cognition, Learning and Assessment - Birth through Childhood 3 Credits

Investigates theories of learning and current brain research. Integrates emotion and motivation and the neurological basis for learning. Analyzes formal and informal procedures for reporting student progress.

Offered: fall.

EDE 432 Seminar in Teaching and Assessment 3 Credits

Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the childhood level. Requires 50 hours of field placement. Addresses objectives, curriculum, strategies, materials and evaluation necessary for teaching science. Emphasizes content, inquiry skills, problem solving and scientific attitude highlighting the NY State Standards. Includes 20 hours of field experience in Grades 1-6.

Fulfills College Core: Oral Communication

EDE 493 Student Teaching- Childhood 12 Credits

Highlights knowledge, skills, and dispositions of professional educators. Two full-time 7-week placements in childhood classrooms require candidates to become the instructional leader under the supervision of cooperating teachers and college faculty.

Prerequisite: signature of chair. **Corequisite:** EDU 494, EDU 497, & EDU 498. **Restriction:** must have 2.7 GPA or higher.

ECCH 221 Literacy I 3 Credits

Examines theories of language development and implications for practice. Strategies are presented to facilitate emergent and developing literacy skills in young children and to develop fluent readers and writers throughout the elementary years. Includes twenty pages of polished prose including a literature review, literature project and lesson plans.

Corequisite: ECCH 222.

Offered: fall.

ECCH 222 Literacy II

3 Credits

Examines effective methods for assessing children's literacy skills and for developing targeted instruction that reinforces, remediates and/or enriches literacy learning. Issues related to the literacy learning of all children, including children with disabilities and children from linguistically and culturally diverse backgrounds are examined. Research-based early intervention programs will be examined. Includes 30 hours of field experience in grades PreK-6.

Corequisite: ECCH 221.

ECCH 412 Managing the Early Childhood and Elementary Classroom

3 Credits

Develops understanding of how to build classroom communities and organize the classroom for student success. Discusses the importance of a proactive approach to prevent behavior problems and investigates a variety of classroom management strategies. Strategies for collaborating with diverse families and other professionals will be explored, including strategies for co-teaching.

ECCH 494 Capstone Seminar for Teacher Candidates

3 Credits

Complements student teaching for education majors. Includes activities that demonstrate how well teacher candidates can integrate theoretical principles and core attributes into the practical work of student teaching. Teacher candidates will complete readings, engage in classroom discussions and construct artifacts related to issues of diversity, ethics, global awareness and social justice. Each artifact will be presented and discussed in class and evaluated for content, effectiveness and illustration of specific core attributes.

Prerequisite: signature of chair. **Corequisite:** student teaching.

Fulfills College Core: Core Capstone

Early Childhood Education Birth-Gr. 2

The information below only pertains to students that enrolled at Canisius in fall 2016 or earlier. This major is no longer available to students. Students interested in Early Childhood Education should declare the Early Childhood/Childhood major.

Chair: Michele Marable, PhD

INTRODUCTION

The Early Childhood Education Birth to Grade 2 program prepares teacher candidates to teach children in Grades PK-Grade 2. Teacher candidates are required to complete major requirements that include pedagogical knowledge and methods that will prepare them to be successful as a teacher at this level. Candidates must also complete general education coursework as identified in the Canisius College Core Curriculum, but also must select a 30 credit liberal arts concentration. Candidate will have opportunities to practice in the field many times throughout their program, culminating with a 14 week student teaching experience where they are expected take over the class of a mentor teacher to hone their professional practice in preparation for their first teaching position after graduation.

QUALIFICATIONS

Students must meet the requirements at all transition points in order to graduate with an education degree and be recommended for teacher certification.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

EDE 100	Human Growth and Development - Birth through Childhood	3
EDE 121	Introduction to Literacy, Children's Literature and the Arts	3
EDU 122	Technology in Education	3
EDY 208	Infant/Toddler Care and Education	3
EDY 209	Developmentally Appropriate Curriculum in Early Childhood Classrooms	3
ECCH 221	Literacy I	3
ECCH 222	Literacy II	3
EDU 250	Foundations of Education	3
EDY 306	Music, Movement and the Arts in Early Childhood Education	3
EDY 310	Teaching Math/Science in Early Childhood Classrooms	3
SPE 341	Inclusive Strategies	3
EDE 390	Cognition, Learning and Assessment - Birth through Childhood	3
ECCH 412	Managing the Early Childhood and Elementary Classroom	3
EDE 432	Seminar in Teaching and Assessment	3

ECCH 493	Student Teaching-Early Childhood/Childhood	12
EDU 495	Child Abuse Workshop	0
EDY 494	Capstone Seminar for Teacher Candidates	3
EDU 496	Prevention of School Violence Workshop	0
EDU 497	Dignity for All Students Act (DASA) Workshop	0
EDU 498	Student Teaching Seminar	3
Total Credits		60

ADDITIONAL COURSE CONSIDERATIONS

English Concentration

Code	Title	Credits
ENG 101	Writing about Literature	3
FYS 101	Explorations of Academic Writing and Special Topics	3
ENG 299	Introduction to English Studies	3
Two 200-level literature courses		6
One pre-1900 American Literature course		3
One pre-1800 British Literature course		3
One Shakespeare course		3
Two writing courses		6
Total Credits		30

Mathematics Concentration

Code	Title	Credits
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 219	Linear Algebra	4
MAT 230	Logic, Set Theory, and Proofs	4
MAT 311	Abstract Algebra	4
MAT 331	Geometry	3
MAT 351	Probability & Statistics I	3
Choose one of the following:		3-4
MAT 211 Calculus III		
Computer Science elective		
Choose one of the following:		3-4
MAT 222 Differential Equations		
Math elective		
Total Credits		32-34

Music Concentration

Code	Title	Credits
FAM 115	Fundamentals of Music	3
FAM 119	Masterpieces of Music	3
FAM 210	Keyboard Musicianship	3
FAM 230 & 230L	Music Theory I and Music Theory I Lab	4
FAM 240 & 240L	Music Theory II and Music Theory II Lab	4
FAM 330 & 330L	Music Theory III and Music Theory III Lab	4
One Music Literature I course		3
One Music Literature II course		3

One Music elective	3
Total Credits	30

Science Concentration

Code	Title	Credits
GEO 325	Introduction to Physical Geography	3
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112/112L	General Chemistry II	4
One physics course		3
Two science electives		6
Total Credits		32

Social Studies Concentration

Code	Title	Credits
ECO 101	Principles of Macroeconomics	3
GEO 325	Introduction to Physical Geography	3
PSC 104	American Political Process	3
HIS 107	History of Modern Europe to 1815	3
HIS 108	History of Modern Europe since 1815	3
HIS 109	History of Asia to 1800	3
HIS 123	History of the United States: The Colonial Period to Reconstruction	3
HIS 124	History of the United States: 1877 to the Present	3
HIS 254	First Peoples	3
One European or Asian/African/Latin American History elective		3
Total Credits		30

Social Justice Concentration

Code	Title	Credits
Foundations Course		3
SOC 273	Social Movements and Social Change	
Research Courses		6
SOC 342	Social Research Methods	
ANT 351	Qualitative Research Methods	
Skills Classes (choose 2)		6
COM 201	Oral Communication	
COM 204	Interpersonal Communication	
COM 302	Small Group Communication	
ECO 311	Metropolitan Economic Development and GIS	
PSY 329	Leadership and Motivation	
PSC 237	State and Local Politics	
Four electives in your Focus - either Local (Urban) or Global		12
Local (urban) Focus electives		
HIS 382	New York State History	
HSV 300	Social and Cultural Diversity	
HSV 301	Social Policies ¹	

HSV 302	Children, Schools, and the Community
PSC 237	State and Local Politics
SOC 111	Contemporary Social Problems ¹
SOC 340	Sociology of the City
Global Focus	
ANT 122	Sociocultural Anthropology
HIS 211	Women In The Western World
HIS 356	Twentieth Century China
HIS 358	Traditional Japan
HIS 394	Modern Middle East
PSC 241	Human Rights and Globalization
HSV 300	Social and Cultural Diversity
HSV 302	Children, Schools, and the Community
Elective	3
One course from the other focus (either Local or Global)	
Total Credits	30

¹ Students may take either HSV 301 or SOC 111 but not both.

French Concentration

Code	Title	Credits
FRC 215	Intermediate French	3
FRC 217	Intermediate French II	3
FRC 323	Topics in Conversation I	3
FRC 324	French Composition through Literature	3
FRC 332	Substance and Style: Effective Writing in French	3
Five French electives		15
Total Credits		30

German Concentration

Code	Title	Credits
GER 215	Intermediate German I	3
GER 216	Intermediate German II	3
GER 323	Topics in Conversation I	3
GER 324	Topics in Conversation II	3
GER 331	Substance and Style: Effective Writing in German I	3
GER 332	Substance and Style: Effective Writing in German II	3
Four German electives		12
Total Credits		30

Spanish Concentration

Code	Title	Credits
SPA 215	Intermediate Spanish ¹	3
SPA 217	Introduction to Spanish Composition ¹	3
SPA 323	Topics in Conversation I: Peninsular Culture and Conversation	3
SPA 324	Topics in Conversation II: Latin American Culture and Civilization	3
SPA 332	Advanced Spanish Composition	3
Five Advanced-Level Spanish Classes		15
Total Credits		30

¹ Students who begin language study at the 300-level may substitute additional electives in lieu of the intermediate (200) level courses. Thus, students still will take 10 courses for the concentration.

LEARNING GOALS AND OBJECTIVES

Learning Goal 1 (KNOWLEDGE – Observed in Writing)

Candidates in the Teacher Education programs will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Teacher candidates will:

- Acquire knowledge of each student, and demonstrate knowledge of student development and learning to promote achievement for all students.
- Know the content they are responsible for teaching, and the pedagogical content knowledge to plan instruction that ensures growth and achievement for all students.

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)

Candidates in the Teacher Education programs will demonstrate professional skills and dispositions necessary for successful performance in their field.

Teacher candidates will:

- Demonstrate professional dispositions and implement instruction that engages and challenges all students to meet or exceed the learning standards.

Learning Goal 3 (SERVICE)

Candidates in the Teacher Education programs will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Teacher candidates will:

- Work with all students to create a dynamic learning environment that supports achievement and growth.
- Use multiple measures to assess and document student growth, evaluate instructional effectiveness, and modify instruction for diverse learners.

Learning Goal 4 (PROFESSIONALISM)

Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Teacher candidates will:

- Set informed goals and strive for continuous professional growth.

Learning Goal 5 (LEADERSHIP)

Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Teacher candidates will:

- Demonstrate professional responsibility and engage relevant stakeholders to maximize impact on student growth, development, and learning.

EDY 208 Infant/Toddler Care and Education 3 Credits

This course utilizes developmental theory and research findings to examine issues of attachment, perception, motor skills, cognition, language, emotions and social skills in children birth through age three. An emphasis is placed on understanding children in the context of family and culture. Requires 10 hours of field placement: infant/toddler.

EDY 209 Developmentally Appropriate Curriculum in Early Childhood Classrooms 3 Credits

Emphasizes research-supported practice for enhancing children's physical, cognitive, social, emotional and behavioral development within the framework of the New York State Standards. Focuses on developmentally appropriate learning opportunities. Requires 10 hours of field placement: PreK/K.

EDY 306 Music, Movement and the Arts in Early Childhood Education 3 Credits

Emphasizes the integration of music, movement, and the arts into the curriculum in K-6 classrooms. Explores various media and materials utilized to enrich learning and stimulate children's creativity.

EDY 310 Teaching Math/Science in Early Childhood Classrooms 3 Credits

Focuses on inquiry methods, problem solving, and diagnostic teaching addressing the New York State standards. Emphasizes hands-on materials, visuals and other multi-model experiences in math/science learning in the early years. Requires 10 hours of field placement Grades 1-2.

EDY 494 Capstone Seminar for Teacher Candidates 3 Credits

Complements student teaching for education majors. Includes activities that demonstrate how well teacher candidates can integrate theoretical principles and core attributes into the practical work of student teaching. Teacher candidates will complete readings, engage in classroom discussions and construct artifacts related to issues of diversity, ethics, global awareness and social justice. Each artifact will be presented and discussed in class and evaluated for content, effectiveness and illustration of specific core attributes.

Prerequisite: signature of chair. **Corequisite:** concurrent registration in student teaching.

Fulfills College Core: Core Capstone

EDE 100 Human Growth and Development - Birth through Childhood 3 Credits

Introduces multiple dimensions of development including influence of family, culture and society. Examines physical, cognitive, emotional and behavioral theories and emphasizes education's role in promoting wellness.

Fulfills College Core: Field 5 (Social Sciences)

EDE 121 Introduction to Literacy, Children's Literature and the Arts 3 Credits

Focuses on the uses of children's books across all curriculum areas. Multicultural literature, authors, illustrators, genres and age-appropriateness are explored. Discusses basic approaches to literacy and the use of children's books in developing literacy. Emphasizes integrating the arts into the total curriculum.

Offered: spring only.

EDE 432 Seminar in Teaching and Assessment 3 Credits

Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the childhood level. Requires 50 hours of field placement. Addresses objectives, curriculum, strategies, materials and evaluation necessary for teaching science. Emphasizes content, inquiry skills, problem solving and scientific attitude highlighting the NY State Standards. Includes 20 hours of field experience in Grades 1-6.
Fulfills College Core: Oral Communication

EDU 122 Technology in Education 3 Credits

Explores applications of technology in education. Emphasizes evaluation and selection of software, high and low-tech devices, distance learning and state of the art technologies that impact teaching.
Offered: fall & spring.

EDU 250 Foundations of Education 3 Credits

Addresses social, philosophical, legal, historical, organizational, theoretical perspectives on education, including multicultural perspectives. Highlights rights and responsibilities of teachers, students and others involved in education.

Corequisite: EDU 495 & EDU 496.

Fulfills College Core: Justice

Offered: fall & spring.

EDU 495 Child Abuse Workshop 0 Credits

Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.

EDU 496 Prevention of School Violence Workshop 0 Credits

Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.

EDU 497 Dignity for All Students Act (DASA) Workshop 0 Credits

Provides six hours of training on the components of the Dignity Act, how school climate impacts students achievement and behavior, understanding diversity and multi-cultural environments, and understanding bullying, harassment and discrimination, including indicators, early warning signs, prevention and intervention and how to interact with families of victims and aggressors.

EDU 498 Student Teaching Seminar 3 Credits

Student Teaching Seminar enhances the student teaching experience through opportunities to foster professional growth and guided reflection on planning, instruction and assessment of learning. The course provides a professional learning community to assist candidates in the transition to careers in teaching.

SPE 341 Inclusive Strategies 3 Credits

Highlights best practices in general education for students with disabilities. Illustrates current developments in special education. Emphasizes collaboration.

Fulfills College Core: Diversity

ECCH 221 Literacy I 3 Credits

Examines theories of language development and implications for practice. Strategies are presented to facilitate emergent and developing literacy skills in young children and to develop fluent readers and writers throughout the elementary years. Includes twenty pages of polished prose including a literature review, literature project and lesson plans.

Corequisite: ECCH 222.

Offered: fall.

ECCH 222 Literacy II 3 Credits

Examines effective methods for assessing children’s literacy skills and for developing targeted instruction that reinforces, remediates and/or enriches literacy learning. Issues related to the literacy learning of all children, including children with disabilities and children from linguistically and culturally diverse backgrounds are examined. Research-based early intervention programs will be examined. Includes 30 hours of field experience in grades PreK-6.

Corequisite: ECCH 221.

ECCH 412 Managing the Early Childhood and Elementary Classroom 3 Credits

Develops understanding of how to build classroom communities and organize the classroom for student success. Discusses the importance of a proactive approach to prevent behavior problems and investigates a variety of classroom management strategies. Strategies for collaborating with diverse families and other professionals will be explored, including strategies for co-teaching.

ECCH 493 Student Teaching-Early Childhood/Childhood 12 Credits

Highlights knowledge, skills, and dispositions of professional educators. Two full-time 7-week placements- one in each childhood and early childhood classroom requires candidates to become the instructional leader under the supervision of cooperating teachers and college faculty.

Prerequisite: signature of chair. **Corequisite:** ECCH 494 & EDU 497.

Restriction: no other courses allowed.

Early Childhood/Childhood

Chair: Michele Marable, PhD

INTRODUCTION

This major prepares candidates in Early Childhood Education which covers Birth to Grade 2 and Childhood Education which covers Grades 1-6. It contains pedagogical knowledge and skills to ensure that candidates are qualified to teach at these level. Many courses are infused with field experiences so candidate build skill as they progress through the program.

In addition, each candidate must take general education coursework as set forth in the Canisius College Core Curriculum and must also choose a 30 credit liberal arts concentration to ensure that they have the content knowledge necessary to teach children from Birth to Grade 2 and Grades 1-6.

QUALIFICATIONS

Students must meet the 2.7 GPA in order to student teach, graduate with an education degree, and be recommended for teacher certification.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student’s freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

EDE 100	Human Growth and Development - Birth through Childhood	3
EDE 121	Introduction to Literacy, Children's Literature and the Arts	3
EDU 122	Technology in Education	3
EDY 208	Infant/Toddler Care and Education	3
EDY 209	Developmentally Appropriate Curriculum in Early Childhood Classrooms	3
ECCH 221	Literacy I	3
ECCH 222	Literacy II	3
EDU 250	Foundations of Education	3
EDY 306	Music, Movement and the Arts in Early Childhood Education	3
EDY 310	Teaching Math/Science in Early Childhood Classrooms	3
EDE 311	Teaching Science in Elementary Schools	3
EDE 317	Teaching Math in Elementary Schools	3
EDE 331	Teaching Social Studies in Elementary Schools	3
SPE 341	Inclusive Strategies	3
EDE 390	Cognition, Learning and Assessment - Birth through Childhood	3
ECCH 412	Managing the Early Childhood and Elementary Classroom	3
EDE 432	Seminar in Teaching and Assessment	3
ECCH 493	Student Teaching-Early Childhood/Childhood	12
ECCH 494	Capstone Seminar for Teacher Candidates	3
EDU 495	Child Abuse Workshop	0
EDU 496	Prevention of School Violence Workshop	0
EDU 497	Dignity for All Students Act (DASA) Workshop	0
EDU 498	Student Teaching Seminar	3
Total Credits		69

MAJOR ELECTIVES

Candidates wishing to obtain an extension to teach grades 7-9 in their area of concentration (English, Mathematics, Social Studies, Spanish, French and German) must take EMC 352 and EMC 391 in addition to the courses listed. The Science, Music, and Social Justice concentrations do not lead to middle school certification extensions.

ADDITIONAL COURSE CONSIDERATIONS

Childhood majors need to choose one of the following academic concentrations: English, Mathematics, Music, Science, Social Studies, French, German or Spanish.

English Concentration

Code	Title	Credits
ENG 101	Writing about Literature	3
FYS 101	Explorations of Academic Writing and Special Topics	3
ENG 299	Introduction to English Studies	3
Two 200-level literature courses		6
One pre-1900 American Literature course		3
One pre-1800 British Literature course		3
One Shakespeare course		3
Two writing courses		6
Total Credits		30

Mathematics Concentration

Code	Title	Credits
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 219	Linear Algebra	4
MAT 230	Logic, Set Theory, and Proofs	4
MAT 311	Abstract Algebra	4
MAT 331	Geometry	3
MAT 351	Probability & Statistics I	3
Choose one of the following:		3-4
MAT 211	Calculus III	
Computer Science elective		
Choose one of the following:		3-4
MAT 222	Differential Equations	
Math elective		
Total Credits		32-34

Music Concentration

Code	Title	Credits
FAM 115	Fundamentals of Music	3
FAM 119	Masterpieces of Music	3
FAM 210	Keyboard Musicianship	3
FAM 230 & 230L	Music Theory I and Music Theory I Lab	4
FAM 240 & 240L	Music Theory II and Music Theory II Lab	4
FAM 330 & 330L	Music Theory III and Music Theory III Lab	4

One Music Literature I course	3
One Music Literature II course	3
One Music elective	3
Total Credits	30

Science Concentration

Code	Title	Credits
GEO 325	Introduction to Physical Geography	3
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112/112L	General Chemistry II	4
One physics course		3
Two science electives		6
Total Credits		32

Social Studies Concentration

Code	Title	Credits
ECO 101	Principles of Macroeconomics	3
GEO 325	Introduction to Physical Geography	3
PSC 104	American Political Process	3
HIS 107	History of Modern Europe to 1815	3
HIS 108	History of Modern Europe since 1815	3
HIS 109	History of Asia to 1800	3
HIS 123	History of the United States: The Colonial Period to Reconstruction	3
HIS 124	History of the United States: 1877 to the Present	3
HIS 254	First Peoples	3
One European or Asian/African/Latin American History elective		3
Total Credits		30

Social Justice Concentration

Code	Title	Credits
Foundations Course		3
SOC 273	Social Movements and Social Change	
Research Courses		6
SOC 342	Social Research Methods	
ANT 351	Qualitative Research Methods	
Skills Classes (choose 2)		6
COM 201	Oral Communication	
COM 204	Interpersonal Communication	
COM 302	Small Group Communication	
ECO 311	Metropolitan Economic Development and GIS	
PSY 329	Leadership and Motivation	
PSC 237	State and Local Politics	
Four electives in your Focus - either Local (Urban) or Global		12
Local (urban) Focus electives		
HIS 382	New York State History	

HSV 300	Social and Cultural Diversity
HSV 301	Social Policies ¹
HSV 302	Children, Schools, and the Community
PSC 237	State and Local Politics
SOC 111	Contemporary Social Problems ¹
SOC 340	Sociology of the City
Global Focus	
ANT 122	Sociocultural Anthropology
HIS 211	Women In The Western World
HIS 356	Twentieth Century China
HIS 358	Traditional Japan
HIS 394	Modern Middle East
PSC 241	Human Rights and Globalization
HSV 300	Social and Cultural Diversity
HSV 302	Children, Schools, and the Community
Elective	3
One course from the other focus (either Local or Global)	
Total Credits	30

¹ Students may take either HSV 301 or SOC 111 but not both.

French Concentration

Code	Title	Credits
FRC 215	Intermediate French	3
FRC 217	Intermediate French II	3
FRC 323	Topics in Conversation I	3
FRC 324	French Composition through Literature	3
FRC 332	Substance and Style: Effective Writing in French	3
Five French electives		15
Total Credits		30

German Concentration

Code	Title	Credits
GER 215	Intermediate German I	3
GER 216	Intermediate German II	3
GER 323	Topics in Conversation I	3
GER 324	Topics in Conversation II	3
GER 331	Substance and Style: Effective Writing in German I	3
GER 332	Substance and Style: Effective Writing in German II	3
Four German electives		12
Total Credits		30

Spanish Concentration

Code	Title	Credits
SPA 215	Intermediate Spanish ¹	3
SPA 217	Introduction to Spanish Composition ¹	3
SPA 323	Topics in Conversation I: Peninsular Culture and Conversation	3
SPA 324	Topics in Conversation II: Latin American Culture and Civilization	3
SPA 332	Advanced Spanish Composition	3

Five Advanced-Level Spanish Classes	15
Total Credits	30

¹ Students who begin language study at the 300-level may substitute additional electives in lieu of the intermediate (200) level courses. Thus, students still will take 10 courses for the concentration.

LEARNING GOALS AND OBJECTIVES

Learning Goal 1 (KNOWLEDGE – Observed in Writing)

Candidates in the Teacher Education programs will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Teacher candidates will:

- Acquire knowledge of each student, and demonstrate knowledge of student development and learning to promote achievement for all students.
- Know the content they are responsible for teaching, and the pedagogical content knowledge to plan instruction that ensures growth and achievement for all students.

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)

Candidates in the Teacher Education programs will demonstrate professional skills and dispositions necessary for successful performance in their field.

Teacher candidates will:

- Demonstrate professional dispositions and implement instruction that engages and challenges all students to meet or exceed the learning standards.

Learning Goal 3 (SERVICE)

Candidates in the Teacher Education programs will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Teacher candidates will:

- Work with all students to create a dynamic learning environment that supports achievement and growth.
- Use multiple measures to assess and document student growth, evaluate instructional effectiveness, and modify instruction for diverse learners.

Learning Goal 4 (PROFESSIONALISM)

Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Teacher candidates will:

- Set informed goals and strive for continuous professional growth.

Learning Goal 5 (LEADERSHIP)

Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-

making with respect to its impact on students and/or clients, organizations, and the wider community.

Teacher candidates will:

- Demonstrate professional responsibility and engage relevant stakeholders to maximize impact on student growth, development, and learning.

EDY 208 Infant/Toddler Care and Education 3 Credits

This course utilizes developmental theory and research findings to examine issues of attachment, perception, motor skills, cognition, language, emotions and social skills in children birth through age three. An emphasis is placed on understanding children in the context of family and culture. Requires 10 hours of field placement: infant/toddler.

EDY 209 Developmentally Appropriate Curriculum in Early Childhood Classrooms 3 Credits

Emphasizes research-supported practice for enhancing children's physical, cognitive, social, emotional and behavioral development within the framework of the New York State Standards. Focuses on developmentally appropriate learning opportunities. Requires 10 hours of field placement: PreK/K.

EDY 306 Music, Movement and the Arts in Early Childhood Education 3 Credits

Emphasizes the integration of music, movement, and the arts into the curriculum in K-6 classrooms. Explores various media and materials utilized to enrich learning and stimulate children's creativity.

EDY 310 Teaching Math/Science in Early Childhood Classrooms 3 Credits

Focuses on inquiry methods, problem solving, and diagnostic teaching addressing the New York State standards. Emphasizes hands-on materials, visuals and other multi-model experiences in math/science learning in the early years. Requires 10 hours of field placement Grades 1-2.

EDE 100 Human Growth and Development - Birth through Childhood 3 Credits

Introduces multiple dimensions of development including influence of family, culture and society. Examines physical, cognitive, emotional and behavioral theories and emphasizes education's role in promoting wellness.

Fulfills College Core: Field 5 (Social Sciences)

EDE 121 Introduction to Literacy, Children's Literature and the Arts 3 Credits

Focuses on the uses of children's books across all curriculum areas. Multicultural literature, authors, illustrators, genres and age-appropriateness are explored. Discusses basic approaches to literacy and the use of children's books in developing literacy. Emphasizes integrating the arts into the total curriculum.

Offered: spring only.

EDE 311 Teaching Science in Elementary Schools 3 Credits

Addresses objectives, curriculum, strategies, materials and evaluation necessary for teaching science. Emphasizes content, inquiry skills, problem solving and scientific attitude highlighting the NY State Standards. Includes 20 hours of field experience in Grades 1-6.

Offered: spring only.

EDE 317 Teaching Math in Elementary Schools 3 Credits

Addresses objectives, curriculum, strategies, materials and evaluation necessary for teaching mathematical concepts. Emphasizes content, inquiry skills and problem solving highlighting the New York State Standards.

Offered: fall.

EDE 331 Teaching Social Studies in Elementary Schools 3 Credits

Addresses the objectives, curriculum, strategies, materials and evaluation necessary for teaching social studies content. Emphasizes historic, geographic, economic, political and social concepts highlighting the New York State Standards.

Offered: spring only.

EDE 390 Cognition, Learning and Assessment - Birth through Childhood 3 Credits

Investigates theories of learning and current brain research. Integrates emotion and motivation and the neurological basis for learning. Analyzes formal and informal procedures for reporting student progress.

Offered: fall.

EDE 432 Seminar in Teaching and Assessment 3 Credits

Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the childhood level. Requires 50 hours of field placement. Addresses objectives, curriculum, strategies, materials and evaluation necessary for teaching science. Emphasizes content, inquiry skills, problem solving and scientific attitude highlighting the NY State Standards. Includes 20 hours of field experience in Grades 1-6.

Fulfills College Core: Oral Communication

ECCH 221 Literacy I 3 Credits

Examines theories of language development and implications for practice. Strategies are presented to facilitate emergent and developing literacy skills in young children and to develop fluent readers and writers throughout the elementary years. Includes twenty pages of polished prose including a literature review, literature project and lesson plans.

Corequisite: ECCH 222.

Offered: fall.

ECCH 222 Literacy II 3 Credits

Examines effective methods for assessing children's literacy skills and for developing targeted instruction that reinforces, remediates and/or enriches literacy learning. Issues related to the literacy learning of all children, including children with disabilities and children from linguistically and culturally diverse backgrounds are examined. Research-based early intervention programs will be examined. Includes 30 hours of field experience in grades PreK-6.

Corequisite: ECCH 221.

ECCH 412 Managing the Early Childhood and Elementary Classroom 3 Credits

Develops understanding of how to build classroom communities and organize the classroom for student success. Discusses the importance of a proactive approach to prevent behavior problems and investigates a variety of classroom management strategies. Strategies for collaborating with diverse families and other professionals will be explored, including strategies for co-teaching.

ECCH 493 Student Teaching-Early Childhood/Childhood 12 Credits

Highlights knowledge, skills, and dispositions of professional educators. Two full-time 7-week placements- one in each childhood and early childhood classroom requires candidates to become the instructional leader under the supervision of cooperating teachers and college faculty.

Prerequisite: signature of chair. **Corequisite:** ECCH 494 & EDU 497.

Restriction: no other courses allowed.

ECCH 494 Capstone Seminar for Teacher Candidates 3 Credits

Complements student teaching for education majors. Includes activities that demonstrate how well teacher candidates can integrate theoretical principles and core attributes into the practical work of student teaching. Teacher candidates will complete readings, engage in classroom discussions and construct artifacts related to issues of diversity, ethics, global awareness and social justice. Each artifact will be presented and discussed in class and evaluated for content, effectiveness and illustration of specific core attributes.

Prerequisite: signature of chair. **Corequisite:** student teaching.

Fulfills College Core: Core Capstone

SPE 341 Inclusive Strategies 3 Credits

Highlights best practices in general education for students with disabilities. Illustrates current developments in special education. Emphasizes collaboration.

Fulfills College Core: Diversity

EDU 122 Technology in Education 3 Credits

Explores applications of technology in education. Emphasizes evaluation and selection of software, high and low-tech devices, distance learning and state of the art technologies that impact teaching.

Offered: fall & spring.

EDU 250 Foundations of Education 3 Credits

Addresses social, philosophical, legal, historical, organizational, theoretical perspectives on education, including multicultural perspectives. Highlights rights and responsibilities of teachers, students and others involved in education.

Corequisite: EDU 495 & EDU 496.

Fulfills College Core: Justice

Offered: fall & spring.

EDU 495 Child Abuse Workshop 0 Credits

Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.

EDU 496 Prevention of School Violence Workshop 0 Credits

Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.

EDU 497 Dignity for All Students Act (DASA) Workshop 0 Credits

Provides six hours of training on the components of the Dignity Act, how school climate impacts students achievement and behavior, understanding diversity and multi-cultural environments, and understanding bullying, harassment and discrimination, including indicators, early warning signs, prevention and intervention and how to interact with families of victims and aggressors.

EDU 498 Student Teaching Seminar 3 Credits

Student Teaching Seminar enhances the student teaching experience through opportunities to foster professional growth and guided reflection on planning, instruction and assessment of learning. The course provides a professional learning community to assist candidates in the transition to careers in teaching.

Physical Education

Chair: Peter M. Koehneke

Director: Clancy M. Seymour, Ed.D.

INTRODUCTION

The Physical Education major is a teacher certification program in physical education (K-grade 12). The department recommends that candidates interested in teaching obtain dual certification in physical education and

health, but this major may be of interest for candidates only interested in teaching physical education. More information can be found at the program webpage (<https://www.canisius.edu/academics/programs/physical-education-health>).

TEACHER CERTIFICATION OPTIONS

The teacher preparation program strives to develop a liberally educated individual who has special knowledge and skills in the areas of movement and sport and their interrelated disciplines. Major emphasis is placed on the development of educational and performance foundations which will prepare an individual to teach in kindergarten through grade 12 or to pursue professional growth through further study and/or graduate work.

Candidates enjoy a continuous and extensive program of clinical and laboratory experiences at the college and through our collaboration with our professional development schools which provide opportunities for in-school observations, micro-teaching, tutoring, and large-group instruction. These experiences help to insure that the program remains responsive to the needs of the candidates, students and the profession. This program of instruction incorporates the standards established for physical education at the local school district level, the New York State learning standards for physical education, and the guidelines set forth by the Society of Health and Physical Educators (SHAPE) America. The teacher certification option culminates with a semester long student teaching experience in the K-12 schools. Each student teacher is given the opportunity to experience the privileges and responsibilities of a full-time teacher on both the elementary and secondary levels. An individual choosing to graduate without completing student teaching must fulfill this credit requirement in consultation with his/her advisor.

QUALIFICATIONS

Academic Criteria for Endorsement and Completion of Program:

- Cumulative GPA of 2.5 or higher-Grade of C or higher in major courses
- Satisfactory performance in field placements
- Satisfactory completion of all program common assignments including submission on TaskStream

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete

the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Select two of the following:

PED 203	Net, Target and Fitness Activities	6
PED 204	Invasion Games	
PED 207	Dance and Gymnastics	
PED 305	Outdoor Curriculum and Cooperative Activities	3
PED 311	Movement Education and Elementary Activities	3
PED 351	Coaching Theory and Techniques	3
PED 354	Adapted Physical Education	3
PED 355	Disability Sports	3
PED 360	Human Growth and Motor Development	3
PED 371	Assessment in Physical Education	3
KIN 235	Kinesiology	3
KIN 494	Capstone in Kinesiology	3
BIO 114 & 114L	Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
BIO 115 & 115L	Musculoskeletal Anatomy and Physiology and Musculoskeletal Anatomy and Physiology Laboratory	4
HED 205	Wellness and Fitness	3
HED 321	Lifeguard, C.P.R., First Aid, WSI	3
HED 337	Exercise Principles and Applications	3
HED 361	Psychology of Sport and Mental Health	3
EDU 122	Technology in Education	3
EDU 250	Foundations of Education	3
SPE 341	Inclusive Strategies	3
PED 372	Seminar in Kinesiology	3
PED 380	Concepts of Teaching Sport Skills	3
PED 441	Teaching Methods in Physical Education	3
PED 441L	Teaching Practicum in Physical Education	0
PED 493	Student Teaching Physical Education/Health: Childhood and Adolescence	12
EDU 495	Child Abuse Workshop	0
EDU 496	Prevention of School Violence Workshop	0
EDU 497	Dignity for All Students Act (DASA) Workshop	0
EDU 498	Student Teaching Seminar	3

Total Credits 86

MAJOR ELECTIVES

Physical Education majors should consult their advisor for major electives.

MAJOR EXPERIENCES

All students in the physical education major must meet and continue to meet the professional standards of the program. No one who jeopardizes the health or well-being of a student, classmate or him or herself will continue as a student in the program. All students must possess the necessary physical attributes and exhibit qualities of good judgment and emotional stability. The physical education program reserves the right to limit attire and adornments (such as clothing, jewelry, piercing, tattooing) of the body, hands, face, and oral cavity. The program assessment handbook outlines the enforcement of this policy. In all cases, the final appeal may be made to the Program Director/Department of Kinesiology chair.

ADDITIONAL COURSE CONSIDERATIONS

HED 321 requires a special course fee that is related to certification requirements. PED 351 and PED 354 have required service learning hours. PED 441 Lab must be taken in the last semester before student teaching. PED 311/PED 360 and PED 354/PED 380 require 30 hour field experiences depending on the matriculation of the student. Transportation needed. Students must also achieve and maintain personal fitness by passing a physical fitness test. While foreign language is not required for graduation, secondary language proficiency must be demonstrated for New York State licensure. Physical Education majors should consult their advisor for additional course considerations.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
BIO 114 & 114L	BIO 115 & 115L
Select one of the following:	Select one of the following:
EDU 122	EDU 122
HED 115	HED 115
HED 220	HED 220
HED 205 (or Field 7)	HED 205 (or Field 7)
FYS 101	ENG 101
PED 305 or 204 (Global)	PED 203 or 207

Sophomore

Fall	Spring
Field 3 or 4	Field 3 or 4
Select one of the following:	PED 311
EDU 122	HED 361 or 337
HED 115	Select one of the following:
HED 220	KIN 235
HED 361 or 337	EDU 250
Select one of the following:	EDU 495
KIN 235	EDU 496
EDU 250	SPE 341
EDU 495	RST 101 or PHI 101

EDU 496

PED 305 or 204 (Global)

RST 101 or PHI 101

Junior

Fall	Spring
Field 1 or 2 (Ethics)	Field 1 or 2 (Ethics)
HED 321	Elective
Elective	PED 371
PED 351	PED 372
PED 354	PED 355
	PED 380

Senior

Fall	Spring
Elective	PED 493
PED 360	EDU 497
PED 441	EDU 498
PED 441L	
KIN 494	

LEARNING GOALS AND OBJECTIVES

LEARNING GOAL 1 (KNOWLEDGE – OBSERVED IN WRITING)

Candidates in the Physical Education program will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Students will:

- Know and apply discipline-specific scientific and theoretical concepts critical to the development of a physically educated person

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)

Candidates in the Physical Education program will demonstrate professional skills and dispositions necessary for successful performance in their field.

Students will:

- Demonstrate that they are physically educated individuals with the knowledge and skills necessary to demonstrate competent movement performance and health-enhancing fitness
- Implement developmentally appropriate learning experiences aligned with local, state, and national standards to address the diverse needs of all students.
- Use effective communication and pedagogical skills and strategies to enhance student engagement and learning.
- Utilize assessments and reflection to foster student learning and inform instructional decisions.

Learning Goal 3 (SERVICE)

Candidates in the Physical Education program will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Students will:

- Demonstrate dispositions essential to becoming effective professionals.

Learning Goal 4 (PROFESSIONALISM)

Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Students will:

- Demonstrate dispositions essential to becoming effective professionals.

Learning Goal 5 (LEADERSHIP)

Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Students will:

- Demonstrate dispositions essential to becoming effective professionals.

Physical Education students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. Some majors and minors can be completed within the minimum 120 credit hour degree requirement. But in some cases additional coursework may be required. Students must complete the appropriate minor request form.

- Coaching Minor (p. 302)

The Coaching Minor is a common minor for many physical education students. The courses in the minor can be attached to any major. Completion of the minor often leads to graduate work at the master's degree level in Coaching Science. The courses can also lead to NY State certification. The minor focuses upon the principles of effective coaching including the role of the coach, practice planning, leadership styles, organization and management, ethics and values clarification, goal setting, communication, career objectives, coaching burn-out and sport psychology. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship. The minor provides students with preparation Kinesiology courses have specific pre-requisites, which are stated in the course descriptions.

- Strength and Conditioning Minor (p. 315)

The Strength and Conditioning minor is common minor for physical education students. The minor provides students with preparation for the fields of strength and conditioning, wellness, and for related graduate work. It also helps students prepare for specialty certifications through the American College of Sports Medicine, the National Strength and Conditioning Association and the National Academy of Sports Medicine. Strength and conditioning courses have specific pre-requisites, which are stated in the course descriptions.

Admission to the Strength and Conditioning minor is competitive due to a limited number of student slots available and is based on skills and knowledge competencies acquired in BIO 114 and lab, BIO 115 and lab, and KIN 235. Each course must be completed with a grade of C (2.0) or higher.

The applicant must attain a minimum C (2.0) cumulative GPA in these five courses and an overall college GPA of C (2.0) or higher. Majors from other departments are eligible for selection by meeting the above requirements. Students interested in the Strength and Conditioning minor at Canisius College must complete a Change of Major/Minor form. Application for the minor must be completed following enrollment in KIN 235.

Note: Dr. Karl Kozlowski and Dr. Chuck Pelitera serve as advisors for the Strength and Conditioning minor program in the Department of Kinesiology.

PED 203 Net, Target and Fitness Activities 3 Credits

Net, Target, and Fitness Games is a content-focused physical education course that includes an emphasis on sport being a learning atmosphere for global awareness. While, the course exposes students to many common and unique sports including, volleyball, pickleball, and self-defense, it also serves to expose students to other cultures that participate in these activities. The course creates an opportunity for students to become competent in net, target and fitness skills. It also provides coinciding opportunities to gain awareness of cultural variations and regional circumstances, through the lens of a particular sport.

Fulfills College Core: Global Awareness

Offered: spring of odd-numbered years.

PED 204 Invasion Games 3 Credits

Invasion Games is a content-focused physical education course that includes an emphasis on sport being a learning atmosphere for global awareness. While, the course exposes students to many common and unique sports including soccer, basketball, and water polo, it also serves to expose students to other cultures that participate in these activities. The course creates an opportunity for students to become competent in strategies required in an 'invasive setting'. It also provides coinciding opportunities to gain awareness of cultures, and communities, and societies, through the lens of a particular sport.

Fulfills College Core: Global Awareness

Offered: fall of odd-numbered years.

PED 207 Dance and Gymnastics 3 Credits

Participation in selected dance and gymnastics forms. Students will learn appropriate organization and teaching progressions for various forms of dance and gymnastics taught in the P-12 curricula.

Restriction: must be in the undergraduate or graduate must be physical education program.

Offered: spring of even-numbered years.

PED 305 Outdoor Curriculum and Cooperative Activities 3 Credits

Philosophy, teaching methods, programming and safety management.

Activities may include initiatives, new games, problem solving, trust activities, ropes course, cycling, mountain biking, rock climbing, rappelling, cross-country skiing and others.

Offered: fall of even-numbered years.

PED 311 Movement Education and Elementary Activities 3 Credits

Conceptual bases, perceptual-motor development and practical applications of movement education. Development, implementation and integration of a physical education program; teaching strategies geared to the elementary level classroom with emphasis on New York and national learning standards in Physical Education. Field experience required.

Restriction: must be physical education or physical and health education major.

Offered: spring.

PED 351 Coaching Theory and Techniques 3 Credits

Coaching is a service activity, which can be experienced as a volunteer, as a paid part-time position or can lead to a full-time profession. The athletes we work with are children and young adults. Many participate at the 'house' league level, while others are involved with more competitive and elite programs. Winning is an important aspect of coaching, however providing a positive athletic experience is essential. Winning may take a secondary role to the development of fundamental skills in many situations. This course focuses upon the principles of effective coaching including the role of the coach, ethics and values clarification. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship.
Offered: fall.

PED 354 Adapted Physical Education 3 Credits

Designed to provide students with an exposure to education, physical education, sport and recreational programming for children with disabilities. Content focuses on variety of disabilities eligible for service under the Individuals with Disabilities Act (IDEA) and the ability to design, conduct, and assess a physical education program that is appropriate for this population. Service-Learning required.

Restriction: must be physical education or physical and health education major.

Fulfills College Core: Diversity

Offered: fall.

PED 355 Disability Sports 3 Credits

Identification of national and international sport and recreational opportunities for individuals with disabilities. Paralympics, Special Olympics, and other disability sport movements and sport classifications will be reviewed. Insight into the historical development of disability sports as well as the delivery of sport models in school and community settings will be included.

Fulfills College Core: Diversity

Offered: spring.

PED 360 Human Growth and Motor Development 3 Credits

Examination of principles of growth and developmental theory with an emphasis on factors affecting changes in movement potential of individuals.

Restriction: must be physical education or physical and health education major.

Offered: fall.

PED 371 Assessment in Physical Education 3 Credits

This course will introduce the teacher candidate to assessment and its role in the physical education profession. Topics include fitness testing, integrating physical education assessment tools, and basic statistics. In addition, there will be a focus on the evaluation of the New York State Standards, authentic assessments and SHAPE America guidelines.

Restriction: must be physical education or physical and health education major; permission of program director.

Offered: spring.

PED 380 Concepts of Teaching Sport Skills 3 Credits

The purpose of this course is to give each student an in depth exposure to and an understanding of the various motor learning principles and factors influencing the acquisition of motor skills. The central focus of the course will be directed to the learning process. Age appropriate activities and instructional guidelines will be examined. This includes the variables related to the learner, the skills to be acquired and the instructional procedures that can be used by the physical educator, coach or exercise specialist.

Restriction: must be physical education or physical and health education major.

Offered: spring.

- PED 441 Teaching Methods in Physical Education** 3 Credits
Development, implementation and integration of a physical education program; teaching strategies for K-12 physical education with emphasis on New York and national learning standards in Physical Education.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Fulfills College Core: Oral Communication
Offered: fall.
- PED 441L Teaching Practicum in Physical Education** 0 Credits
The teacher candidate will train for student teaching at the K-12 school level. To successfully complete this experience the candidate will finish a series of modules designed to bridge the gap between the college classroom and the teaching setting.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Offered: fall & spring.
- PED 493 Student Teaching Physical Education/Health: Childhood and Adolescence** 12 Credits
Seven-week student teaching experience in an elementary school, Grades 1-6, and in a high school, Grades 7-12, culminating in preparation for teacher certification. Grade: Pass/Fail. The combination of PED 493, EDU 495, EDU 496, EDU 497, and EDU 498 during the student teaching semester will count as a full semester of three courses, 15 credit hours.
Prerequisite: Completion of all other course requirements and department approval, and minimum GPA of 2.5 in all major courses. **Corequisite:** EDU 497 & EDU 498. **Restriction:** permission of program director.
Offered: fall & spring.
- HED 205 Wellness and Fitness** 3 Credits
Lecture and laboratory. Skills, teaching methods, resource units, evaluative instruments, teaching aids, leading to an overall understanding of the principles of health and wellness. Focus on physical fitness testing, cardiovascular exercise, muscular strength, muscular endurance, flexibility and body composition. There is additional focus on special populations, childhood obesity and the development of a personal fitness program.
Offered: fall & spring.
- HED 321 Lifeguard, C.P.R., First Aid, WSI** 3 Credits
Knowledge, skill techniques and appreciations necessary to meet certification requirements of the American Red Cross. Certification fee required for this course.
Prerequisite: department swimming test and completion of departmental recommendation. **Restriction:** must be in the undergraduate or graduate must be physical education program.
Offered: fall.
- HED 337 Exercise Principles and Applications** 3 Credits
This course will address the many aspects of fitness and exercise. Students will experience classroom lecture as well as practical experience in the weight room and other alternative exercise facilities. Students will gain experience in the proper design of exercise programs and will understand the importance of periodization as it relates to exercise. Upon successful completion of this course, the student will have a vast knowledge of the principles surrounding strength and conditioning.
Prerequisite: minimum grade of C in BIO 114 & BIO 114L.
Offered: fall & spring.
- HED 361 Psychology of Sport and Mental Health** 3 Credits
This course address sport psychology from a sports studies perspective incorporating interdisciplinary knowledge from the social sciences. It is an appropriate approach for many students seeking to understand the psychological processes facing athletes in a competitive environment. Considerable interest surrounds the efforts of sport psychologists to optimize the performance of those characters we call athletes - the sport heroes of our society. Superior athletic performance has long held great intrigue. Tremendous improvements in the identification and measurement of the psychological factors related to athletic performance have resulted in significant improvements in an athlete's ability to produce top level performance on a consistent basis. This course focuses on the application of these psychological principles by athletes, coaches and sport psychology consultants in what has been a quest to produce the ultimate athlete.
Fulfills College Core: Field 5 (Social Sciences)
Offered: fall & spring.
- KIN 235 Kinesiology** 3 Credits
Scientific study of human movement, emphasizing the basic principles of musculoskeletal anatomy, neuromuscular physiology and biomechanics.
Prerequisite: minimum grade of C in both BIO 115 and BIO 115L.
Offered: fall & spring.
- KIN 494 Capstone in Kinesiology** 3 Credits
This seminar is a reflective course that is taken for students in the Department of Kinesiology. Students reflect on service excursions, review readings, debate related topics in kinesiology, and compose a final report on a topic in the profession laced with justice, diversity, ethical, and global issues.
Restriction: KIN department majors only.
Fulfills College Core: Core Capstone
Offered: fall & spring.
- SPE 341 Inclusive Strategies** 3 Credits
Highlights best practices in general education for students with disabilities. Illustrates current developments in special education. Emphasizes collaboration.
Fulfills College Core: Diversity
- EDU 122 Technology in Education** 3 Credits
Explores applications of technology in education. Emphasizes evaluation and selection of software, high and low-tech devices, distance learning and state of the art technologies that impact teaching.
Offered: fall & spring.
- EDU 250 Foundations of Education** 3 Credits
Addresses social, philosophical, legal, historical, organizational, theoretical perspectives on education, including multicultural perspectives. Highlights rights and responsibilities of teachers, students and others involved in education.
Corequisite: EDU 495 & EDU 496.
Fulfills College Core: Justice
Offered: fall & spring.
- EDU 495 Child Abuse Workshop** 0 Credits
Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.
- EDU 496 Prevention of School Violence Workshop** 0 Credits
Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.

EDU 497 Dignity for All Students Act (DASA) Workshop 0 Credits

Provides six hours of training on the components of the Dignity Act, how school climate impacts students achievement and behavior, understanding diversity and multi-cultural environments, and understanding bullying, harassment and discrimination, including indicators, early warning signs, prevention and intervention and how to interact with families of victims and aggressors.

EDU 498 Student Teaching Seminar 3 Credits

Student Teaching Seminar enhances the student teaching experience through opportunities to foster professional growth and guided reflection on planning, instruction and assessment of learning. The course provides a professional learning community to assist candidates in the transition to careers in teaching.

BIO 114 Human Biology: Introduction to Human Anatomy and Physiology 3 Credits

Introductory course for those students requiring an understanding of the structure and function of the human body. Course examines the relationships among physiology, anatomy, metabolism, genetics, evolution, the physical environment, and exercise, and how they relate to diet, human health and disease. Three hours of lecture and one three-hour lab per week.

Fulfills College Core: Field 6 (Natural Sciences)

Offered: fall & spring.

BIO 114L Human Biology: Introduction to Human Anatomy and Physiology Laboratory 1 Credit

One three-hour lab per week.

Corequisite: BIO 114.

Offered: fall & spring.

BIO 115 Musculoskeletal Anatomy and Physiology 3 Credits

Examination of the anatomy, physiology and biomechanical characteristics of the musculoskeletal components, and associated neural and vascular structures, of the human body. Three hours of lecture and one three-hour lab per week.

Prerequisite: minimum grade of C in BIO 114.

Offered: fall & spring.

BIO 115L Musculoskeletal Anatomy and Physiology Laboratory 1 Credit

One three-hour lab per week.

Corequisite: BIO 115.

Offered: fall & spring.

Physical Education/Health

Chair: Peter M. Koehneke

Director: Clancy M. Seymour, Ed.D.

INTRODUCTION

The teacher preparation program strives to develop a liberally educated individual who has special knowledge and skills in the areas of movement and sport and their interrelated disciplines. Major emphasis is placed on the development of educational and performance foundations which will prepare an individual to teach in kindergarten through grade 12 or to pursue professional growth through further study and/or graduate work. Additional information is available at the program website (<https://www.canisius.edu/academics/programs/physical-education-health>).

Candidates enjoy a continuous and extensive program of clinical and laboratory experiences at the college and through our collaboration with our professional development schools which provide opportunities for in-school observations, micro-teaching, tutoring, and large-group instruction. These experiences help to insure that the program remains

responsive to the needs of the candidates, students and the profession. This program of instruction incorporates the standards established for physical education and health at the local school district level, the New York State learning standards for health and physical education, the guidelines set forth by the Society of Health and Physical Educators (SHAPE) America and the curriculum standards outlined for health education and health certification by the American Association for Health Education (AAHE). The teacher certification option culminates with a fourteen-week student teaching experience in the K-12 schools. Each student teacher is given the opportunity to experience the privileges and responsibilities of a full-time teacher on both the elementary and secondary levels. An individual choosing to graduate without completing student teaching must fulfill this credit requirement in consultation with his or her advisor.

QUALIFICATIONS

Academic Criteria for Endorsement and Completion of Program:

- Cumulative GPA of 2.5 or higher
- Grades of C or higher in major courses
- Satisfactory performance in field placements
- Satisfactory completion of all program common assignments including submission on TaskStream.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Physical Education Courses

Select two of the following:	6
PED 203 Net, Target and Fitness Activities	
PED 204 Invasion Games	
PED 207 Dance and Gymnastics	
PED 305 Outdoor Curriculum and Cooperative Activities	3
PED 311 Movement Education and Elementary Activities	3
PED 351 Coaching Theory and Techniques	3
PED 354 Adapted Physical Education	3
PED 355 Disability Sports	3
PED 360 Human Growth and Motor Development	3
PED 371 Assessment in Physical Education	3
KIN 235 Kinesiology	3
KIN 494 Capstone in Kinesiology	3

Health Education Courses

BIO 114 & 114L Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
BIO 115 & 115L Musculoskeletal Anatomy and Physiology and Musculoskeletal Anatomy and Physiology Laboratory	4
HED 115 Basic Nutrition	3
HED 205 Wellness and Fitness	3
HED 220 Healthy Behaviors	3
HED 321 Lifeguard, C.P.R., First Aid, WSI	3
HED 325 School Health	3
HED 326 School Health Curriculum	3
HED 337 Exercise Principles and Applications	3
HED 361 Psychology of Sport and Mental Health	3
HED 425 Evolution of Disease and Illness	3

Pedagogical Core

EDU 122 Technology in Education	3
EDU 250 Foundations of Education	3
PED 372 Seminar in Kinesiology	3
PED 380 Concepts of Teaching Sport Skills	3
SPE 341 Inclusive Strategies	3
PED 441 Teaching Methods in Physical Education	3
PED 441L Teaching Practicum in Physical Education	0
PED 493 Student Teaching Physical Education/Health: Childhood and Adolescence	12

EDU 495 Child Abuse Workshop	0
EDU 496 Prevention of School Violence Workshop	0
EDU 497 Dignity for All Students Act (DASA) Workshop	0
EDU 498 Student Teaching Seminar	3
Total Credits	101

MAJOR EXPERIENCES

All students in the physical education/health major must meet and continue to meet the professional standards of the program. No one who jeopardizes the health or well-being of a student, classmate or him or herself will continue as a student in the program. All students must possess the necessary physical attributes and exhibit qualities of good judgment and emotional stability. The physical education/health program reserves the right to limit attire and adornments (such as clothing, jewelry, piercing, tattooing) of the body, hands, face, and oral cavity. The program assessment handbook outlines the enforcement of this policy. In all cases, the final appeal may be made to the Program Director/Department of Kinesiology chair.

ADDITIONAL COURSE CONSIDERATIONS

PED 321 requires a special course fee that is related to certification requirements. PED 351 and PED 354 have required service learning hours. PED 441 must be taken in the last semester before student teaching. PED 311 and PED 371 require 30 hour field experiences. Transportation needed. Students must also achieve and maintain personal fitness by passing a physical fitness test. While foreign language is not required for graduation, secondary language proficiency must be demonstrated for New York State licensure. Physical Education majors should consult their advisor for additional course considerations.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
BIO 114 & 114L	BIO 115 & 115L
Select one of the following:	Select one of the following:
EDU 122	EDU 122
HED 115	HED 115
HED 220	HED 220
HED 205 (or Field 7)	HED 205 (or Field 7)
FYS 101	ENG 101
PED 305 or 204 (Global)	PED 203 or 207

Sophomore

Fall	Spring
Field 3 or 4	Field 3 or 4
Select one of the following:	PED 311
EDU 122	HED 361 or 337
HED 115	Select one of the following:
HED 220	KIN 235
HED 361 or 337	EDU 250
Select one of the following:	EDU 495
KIN 235	EDU 496

EDU 250	SPE 341
EDU 495	RST 101 or PHI 101
EDU 496	
PED 305 or 204 (Global)	
RST 101 or PHI 101	
Junior	
Fall	Spring
Field 1 or 2 (Ethics)	Field 1 or 2 (Ethics)
HED 321	HED 325
HED 425	PED 371
PED 351	PED 372
PED 354	PED 355
	PED 380
Senior	
Fall	Spring
HED 326	PED 493
PED 360	EDU 497
PED 441	EDU 498
PED 441L	
KIN 494	

LEARNING GOALS AND OBJECTIVES

LEARNING GOAL 1 (KNOWLEDGE – OBSERVED IN WRITING)

Candidates in the Physical Education program will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Students will:

- Know and apply discipline-specific scientific and theoretical concepts critical to the development of a physically educated person

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)

Candidates in the Physical Education program will demonstrate professional skills and dispositions necessary for successful performance in their field.

Students will:

- Demonstrate that they are physically educated individuals with the knowledge and skills necessary to demonstrate competent movement performance and health-enhancing fitness
- Implement developmentally appropriate learning experiences aligned with local, state, and national standards to address the diverse needs of all students.
- Use effective communication and pedagogical skills and strategies to enhance student engagement and learning.
- Utilize assessments and reflection to foster student learning and inform instructional decisions.

Learning Goal 3 (SERVICE)

Candidates in the Physical Education program will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional

development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Students will:

- Demonstrate dispositions essential to becoming effective professionals.

Learning Goal 4 (PROFESSIONALISM)

Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Students will:

- Demonstrate dispositions essential to becoming effective professionals.

Learning Goal 5 (LEADERSHIP)

Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Students will:

- Demonstrate dispositions essential to becoming effective professionals.

COACHING MINOR

The Coaching Minor is a common minor for many physical education students. The courses in the minor can be attached to any major. Completion of the minor often leads to graduate work at the master's degree level in Coaching Science. The courses can also lead to NY State certification. The minor focuses upon the principles of effective coaching including the role of the coach, practice planning, leadership styles, organization and management, ethics and values clarification, goal setting, communication, career objectives, coaching burn-out and sport psychology. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship. The minor provides students with preparation Kinesiology courses that have specific pre-requisites, which are stated in the course descriptions.

Coaching Minor Courses

PED 351	Coaching Theory and Techniques	3
PED 365	Principles and Philosophy of Coaching	3
HED 205	Wellness and Fitness	3
or HED 337	Exercise Principles and Applications	
HED 115	Basic Nutrition	3
HED 321	Lifeguard, C.P.R., First Aid, WSI	3
or KIN 170	Emergency Care	
PED 380	Concepts of Teaching Sport Skills	3
Total Credits		18

Note: Dr. Gregory Reeds serves as the advisor for the coaching minor program in the Department of Kinesiology.

- PED 203 Net, Target and Fitness Activities** 3 Credits
 Net, Target, and Fitness Games is a content-focused physical education course that includes an emphasis on sport being a learning atmosphere for global awareness. While, the course exposes students to many common and unique sports including, volleyball, pickleball, and self-defense, it also serves to expose students to other cultures that participate in these activities. The course creates an opportunity for students to become competent in net, target and fitness skills. It also provides coinciding opportunities to gain awareness of cultural variations and regional circumstances, through the lens of a particular sport.
Fulfills College Core: Global Awareness
Offered: spring of odd-numbered years.
- PED 204 Invasion Games** 3 Credits
 Invasion Games is a content-focused physical education course that includes an emphasis on sport being a learning atmosphere for global awareness. While, the course exposes students to many common and unique sports including soccer, basketball, and water polo, it also serves to expose students to other cultures that participate in these activities. The course creates an opportunity for students to become competent in strategies required in an 'invasive setting'. It also provides coinciding opportunities to gain awareness of cultures, and communities, and societies, through the lens of a particular sport.
Fulfills College Core: Global Awareness
Offered: fall of odd-numbered years.
- PED 207 Dance and Gymnastics** 3 Credits
 Participation in selected dance and gymnastics forms. Students will learn appropriate organization and teaching progressions for various forms of dance and gymnastics taught in the P-12 curricula.
Restriction: must be in the undergraduate or graduate must be physical education program.
Offered: spring of even-numbered years.
- PED 305 Outdoor Curriculum and Cooperative Activities** 3 Credits
 Philosophy, teaching methods, programming and safety management. Activities may include initiatives, new games, problem solving, trust activities, ropes course, cycling, mountain biking, rock climbing, rappelling, cross-country skiing and others.
Offered: fall of even-numbered years.
- PED 311 Movement Education and Elementary Activities** 3 Credits
 Conceptual bases, perceptual-motor development and practical applications of movement education. Development, implementation and integration of a physical education program; teaching strategies geared to the elementary level classroom with emphasis on New York and national learning standards in Physical Education. Field experience required.
Restriction: must be physical education or physical and health education major.
Offered: spring.
- PED 351 Coaching Theory and Techniques** 3 Credits
 Coaching is a service activity, which can be experienced as a volunteer, as a paid part-time position or can lead to a full-time profession. The athletes we work with are children and young adults. Many participate at the 'house' league level, while others are involved with more competitive and elite programs. Winning is an important aspect of coaching, however providing a positive athletic experience is essential. Winning may take a secondary role to the development of fundamental skills in many situations. This course focuses upon the principles of effective coaching including the role of the coach, ethics and values clarification. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship.
Offered: fall.
- PED 354 Adapted Physical Education** 3 Credits
 Designed to provide students with an exposure to education, physical education, sport and recreational programming for children with disabilities. Content focuses on variety of disabilities eligible for service under the Individuals with Disabilities Act (IDEA) and the ability to design, conduct, and assess a physical education program that is appropriate for this population. Service-Learning required.
Restriction: must be physical education or physical and health education major.
Fulfills College Core: Diversity
Offered: fall.
- PED 355 Disability Sports** 3 Credits
 Identification of national and international sport and recreational opportunities for individuals with disabilities. Paralympics, Special Olympics, and other disability sport movements and sport classifications will be reviewed. Insight into the historical development of disability sports as well as the delivery of sport models in school and community settings will be included.
Fulfills College Core: Diversity
Offered: spring.
- PED 360 Human Growth and Motor Development** 3 Credits
 Examination of principles of growth and developmental theory with an emphasis on factors affecting changes in movement potential of individuals.
Restriction: must be physical education or physical and health education major.
Offered: fall.
- PED 371 Assessment in Physical Education** 3 Credits
 This course will introduce the teacher candidate to assessment and its role in the physical education profession. Topics include fitness testing, integrating physical education assessment tools, and basic statistics. In addition, there will be a focus on the evaluation of the New York State Standards, authentic assessments and SHAPE America guidelines.
Restriction: must be physical education or physical and health education major; permission of program director.
Offered: spring.
- PED 372 Seminar in Kinesiology** 3 Credits
 The course requires students to engage in professional writing; students will be taught how to conduct and write about a given topic. All course-content will be research-based, and students will be encouraged to see the connections between the research used throughout the class and the specific topic they are reviewing for the extended writing project.
Restriction: KIN department majors only.
Fulfills College Core: Advanced Writing-Intensive
Offered: spring.
- PED 380 Concepts of Teaching Sport Skills** 3 Credits
 The purpose of this course is to give each student an in depth exposure to and an understanding of the various motor learning principles and factors influencing the acquisition of motor skills. The central focus of the course will be directed to the learning process. Age appropriate activities and instructional guidelines will be examined. This includes the variables related to the learner, the skills to be acquired and the instructional procedures that can be used by the physical educator, coach or exercise specialist.
Restriction: must be physical education or physical and health education major.
Offered: spring.

- PED 441 Teaching Methods in Physical Education** 3 Credits
Development, implementation and integration of a physical education program; teaching strategies for K-12 physical education with emphasis on New York and national learning standards in Physical Education.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Fulfills College Core: Oral Communication
Offered: fall.
- PED 441L Teaching Practicum in Physical Education** 0 Credits
The teacher candidate will train for student teaching at the K-12 school level. To successfully complete this experience the candidate will finish a series of modules designed to bridge the gap between the college classroom and the teaching setting.
Prerequisite: signature of program director. **Restriction:** permission of program director.
Offered: fall & spring.
- PED 493 Student Teaching Physical Education/Health: Childhood and Adolescence** 12 Credits
Seven-week student teaching experience in an elementary school, Grades 1-6, and in a high school, Grades 7-12, culminating in preparation for teacher certification. Grade: Pass/Fail. The combination of PED 493, EDU 495, EDU 496, EDU 497, and EDU 498 during the student teaching semester will count as a full semester of three courses, 15 credit hours.
Prerequisite: Completion of all other course requirements and department approval, and minimum GPA of 2.5 in all major courses. **Corequisite:** EDU 497 & EDU 498. **Restriction:** permission of program director.
Offered: fall & spring.
- HED 115 Basic Nutrition** 3 Credits
This course will address all aspects of proper nutrition. The class will address material such as macronutrients, micronutrients, daily caloric intake and portion sizes. Students will gain knowledge of nutrition through class lectures, interactive activities and peer presentations. Upon successful completion of the course, students will have a working knowledge of proper nutrition and appropriate dietary habits.
Offered: fall & spring.
- HED 205 Wellness and Fitness** 3 Credits
Lecture and laboratory. Skills, teaching methods, resource units, evaluative instruments, teaching aids, leading to an overall understanding of the principles of health and wellness. Focus on physical fitness testing, cardiovascular exercise, muscular strength, muscular endurance, flexibility and body composition. There is additional focus on special populations, childhood obesity and the development of a personal fitness program.
Offered: fall & spring.
- HED 220 Healthy Behaviors** 3 Credits
Examines health determinants and the effects on all seven dimensions of health. Assessment of personal lifestyle behaviors and factors influencing current and relevant health issues. Emphasis on personal behavior modification to practice health-enhancing behaviors and to reduce health risks. Guidelines for healthy practices related to nutrition, mental health, cancer prevention, HIV/STDs, cardiovascular disease, stress management, sexuality, physical fitness, drugs and alcohol and relationships. Establishes foundation for living healthy and productive lives.
Offered: fall & spring.
- HED 321 Lifeguard, C.P.R., First Aid, WSI** 3 Credits
Knowledge, skill techniques and appreciations necessary to meet certification requirements of the American Red Cross. Certification fee required for this course.
Prerequisite: department swimming test and completion of departmental recommendation. **Restriction:** must be in the undergraduate or graduate must be physical education program.
Offered: fall.
- HED 325 School Health** 3 Credits
Students explore the most prevalent health and safety issues of schooled children and youth and examines rationale for health education, theories, methods, strategies, and techniques of health education program planning. Additionally, students will plan effective comprehensive school health education programs: integration of school and community services. A mandatory 50 participation hours at a local school must be completed for a passing grade in this course.
Restriction: must be physical education or physical and health education major.
Offered: spring.
- HED 326 School Health Curriculum** 3 Credits
Students will practice strategies and methodologies needed for effectively teaching health education. Students will participate in 50 hours of field experience, if they have not already done so, and will analyze experiences as a process to improving instruction. Students will demonstrate their ability to plan for instruction by writing and implementing learning experiences that meet the National Health Education Standards.
Restriction: must be physical education or physical and health education major.
Offered: fall.
- HED 337 Exercise Principles and Applications** 3 Credits
This course will address the many aspects of fitness and exercise. Students will experience classroom lecture as well as practical experience in the weight room and other alternative exercise facilities. Students will gain experience in the proper design of exercise programs and will understand the importance of periodization as it relates to exercise. Upon successful completion of this course, the student will have a vast knowledge of the principles surrounding strength and conditioning.
Prerequisite: minimum grade of C in BIO 114 & BIO 114L.
Offered: fall & spring.
- HED 361 Psychology of Sport and Mental Health** 3 Credits
This course address sport psychology from a sports studies perspective incorporating interdisciplinary knowledge from the social sciences. It is an appropriate approach for many students seeking to understand the psychological processes facing athletes in a competitive environment. Considerable interest surrounds the efforts of sport psychologists to optimize the performance of those characters we call athletes - the sport heroes of our society. Superior athletic performance has long held great intrigue. Tremendous improvements in the identification and measurement of the psychological factors related to athletic performance have resulted in significant improvements in an athlete's ability to produce top level performance on a consistent basis. This course focuses on the application of these psychological principles by athletes, coaches and sport psychology consultants in what has been a quest to produce the ultimate athlete.
Fulfills College Core: Field 5 (Social Sciences)
Offered: fall & spring.

HED 425 Evolution of Disease and Illness 3 Credits

Overview of humanity's triumphs and failures in the ongoing fight against illness and disease. Explores history of disease, current health issues and trends to determine outlook for emerging health concerns of the future. Examines various models of disease to explain disease agents and route of transmission throughout the body's systems. Analysis of disease occurrence, predisposing factors, body's immune response, symptoms, prevention, treatment and control.

Offered: fall & spring.

KIN 235 Kinesiology 3 Credits

Scientific study of human movement, emphasizing the basic principles of musculoskeletal anatomy, neuromuscular physiology and biomechanics.

Prerequisite: minimum grade of C in both BIO 115 and BIO 115L.

Offered: fall & spring.

KIN 494 Capstone in Kinesiology 3 Credits

This seminar is a reflective course that is taken for students in the Department of Kinesiology. Students reflect on service excursions, review readings, debate related topics in kinesiology, and compose a final report on a topic in the profession laced with justice, diversity, ethical, and global issues.

Restriction: KIN department majors only.

Fulfills College Core: Core Capstone

Offered: fall & spring.

BIO 114 Human Biology: Introduction to Human Anatomy and Physiology 3 Credits

Introductory course for those students requiring an understanding of the structure and function of the human body. Course examines the relationships among physiology, anatomy, metabolism, genetics, evolution, the physical environment, and exercise, and how they relate to diet, human health and disease. Three hours of lecture and one three-hour lab per week.

Fulfills College Core: Field 6 (Natural Sciences)

Offered: fall & spring.

BIO 114L Human Biology: Introduction to Human Anatomy and Physiology Laboratory 1 Credit

One three-hour lab per week.

Corequisite: BIO 114.

Offered: fall & spring.

BIO 115 Musculoskeletal Anatomy and Physiology 3 Credits

Examination of the anatomy, physiology and biomechanical characteristics of the musculoskeletal components, and associated neural and vascular structures, of the human body. Three hours of lecture and one three-hour lab per week.

Prerequisite: minimum grade of C in BIO 114.

Offered: fall & spring.

BIO 115L Musculoskeletal Anatomy and Physiology Laboratory 1 Credit

One three-hour lab per week.

Corequisite: BIO 115.

Offered: fall & spring.

EDU 122 Technology in Education 3 Credits

Explores applications of technology in education. Emphasizes evaluation and selection of software, high and low-tech devices, distance learning and state of the art technologies that impact teaching.

Offered: fall & spring.

EDU 250 Foundations of Education 3 Credits

Addresses social, philosophical, legal, historical, organizational, theoretical perspectives on education, including multicultural perspectives. Highlights rights and responsibilities of teachers, students and others involved in education.

Corequisite: EDU 495 & EDU 496.

Fulfills College Core: Justice

Offered: fall & spring.

EDU 495 Child Abuse Workshop 0 Credits

Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.

EDU 496 Prevention of School Violence Workshop 0 Credits

Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.

EDU 497 Dignity for All Students Act (DASA) Workshop 0 Credits

Provides six hours of training on the components of the Dignity Act, how school climate impacts students achievement and behavior, understanding diversity and multi-cultural environments, and understanding bullying, harassment and discrimination, including indicators, early warning signs, prevention and intervention and how to interact with families of victims and aggressors.

EDU 498 Student Teaching Seminar 3 Credits

Student Teaching Seminar enhances the student teaching experience through opportunities to foster professional growth and guided reflection on planning, instruction and assessment of learning. The course provides a professional learning community to assist candidates in the transition to careers in teaching.

SPE 341 Inclusive Strategies 3 Credits

Highlights best practices in general education for students with disabilities. Illustrates current developments in special education. Emphasizes collaboration.

Fulfills College Core: Diversity

Special Education Childhood

Chair: Michele Marable, PhD

INTRODUCTION

This major prepares candidates in Childhood Education which covers Grades 1-6 and Childhood Special Education which covers Grades 1-6 for Students with Disabilities. It contains pedagogical knowledge and skills to ensure that candidates are qualified to teach at these level and in high needs classroom settings. Many courses are infused with field experiences so candidate build skill as they progress through the program. In addition, each candidate must take general education coursework as set forth in the Canisius College Core Curriculum and must also choose a 30 credit liberal arts concentration to ensure that they have the content knowledge necessary to teach children from Grades 1-6 in regular and special education settings. More information can be found at the program website (<https://www.canisius.edu/academics/programs/special-education-childhood-education-undergraduate>). (<http://www.canisius.edu/teacher-ed/special-ed>)

QUALIFICATIONS

Students must meet the requirements at all transition points in order to graduate with an education degree and be recommended for teacher certification. Please see School of Education and Human Services website for transition point requirements.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

SPE 100	Introduction to Special Education	3
EDE 100	Human Growth and Development - Birth through Childhood	3
EDE 121	Introduction to Literacy, Children's Literature and the Arts	3
EDU 122	Technology in Education	3
ECCH 221	Literacy I	3
ECCH 222	Literacy II	3
SPE 291	Nature and Needs of CH Students with Learning Disabilities	3
SPE 292	Remedial Strategies in the Childhood Content Areas	3
EDU 250	Foundations of Education	3
SPE 311	Nature/Needs of Childhood Students with Intellectual Disabilities & Autism Spectrum Disorders	3
SPE 312	Multidisciplinary Assessment and Childhood Teaching	3
EDE 317	Teaching Math in Elementary Schools	3
EDE 390	Cognition, Learning and Assessment - Birth through Childhood	3
SPE 330	Nature/Needs of Childhood Students with Behavioral Disorders	3

SPE 335	Classroom Management in Childhood Classrooms	3
SPE 432	Seminar in Teaching and Assessment	3
EDE 494	Capstone Seminar for Teacher Candidates	3
SPE 493	Supervised Student Teaching	12
EDU 495	Child Abuse Workshop	0
EDU 496	Prevention of School Violence Workshop	0
EDU 497	Dignity for All Students Act (DASA) Workshop	0
EDU 498	Student Teaching Seminar	3
Total Credits		66

MAJOR ELECTIVES

Candidates wishing to obtain an extension to teach grades 7-9 in their area of concentration (English, Mathematics, Social Studies, Spanish, French and German) must take EMC 352 and EMC 391 in addition to the courses listed.

ADDITIONAL COURSE CONSIDERATIONS

Childhood majors need to choose one of the following academic concentrations: English, Mathematics, Music, Science, Social Studies, French, German, Spanish, or Social Justice.

English Concentration

Code	Title	Credits
ENG 101	Writing about Literature	3
FYS 101	Explorations of Academic Writing and Special Topics	3
ENG 299	Introduction to English Studies	3
Two 200-level literature courses		6
One pre-1900 American Literature course		3
One pre-1800 British Literature course		3
One Shakespeare course		3
Two writing courses		6
Total Credits		30

Mathematics Concentration

Code	Title	Credits
MAT 111	Calculus I	4
MAT 112	Calculus II	4
MAT 219	Linear Algebra	4
MAT 230	Logic, Set Theory, and Proofs	4
MAT 311	Abstract Algebra	4
MAT 331	Geometry	3
MAT 351	Probability & Statistics I	3
Choose one of the following:		3-4
MAT 211	Calculus III	
Computer Science elective		
Choose one of the following:		3-4
MAT 222	Differential Equations	
Math elective		
Total Credits		32-34

Music Concentration

Code	Title	Credits
FAM 115	Fundamentals of Music	3

FAM 119	Masterpieces of Music	3
FAM 210	Keyboard Musicianship	3
FAM 230 & 230L	Music Theory I and Music Theory I Lab	4
FAM 240 & 240L	Music Theory II and Music Theory II Lab	4
FAM 330 & 330L	Music Theory III and Music Theory III Lab	4
One Music Literature I course		3
One Music Literature II course		3
One Music elective		3
Total Credits		30

Science Concentration

Code	Title	Credits
GEO 325	Introduction to Physical Geography	3
BIO 111 & 111L	Introductory Biology I and Introductory Biology Laboratory I	4
BIO 112 & 112L	Introductory Biology II and Introductory Biology Laboratory II	4
BIO 211 & 211L	Biochemistry and Cell Biology I and Biochemistry and Cell Biology Lab I	4
CHM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	4
CHM 112/112L	General Chemistry II	4
One physics course		3
Two science electives		6
Total Credits		32

Social Studies Concentration

Code	Title	Credits
ECO 101	Principles of Macroeconomics	3
GEO 325	Introduction to Physical Geography	3
PSC 104	American Political Process	3
HIS 107	History of Modern Europe to 1815	3
HIS 108	History of Modern Europe since 1815	3
HIS 109	History of Asia to 1800	3
HIS 123	History of the United States: The Colonial Period to Reconstruction	3
HIS 124	History of the United States: 1877 to the Present	3
HIS 254	First Peoples	3
One European or Asian/African/Latin American History elective		3
Total Credits		30

Social Justice Concentration

Code	Title	Credits
Foundations Course		3
SOC 273	Social Movements and Social Change	
Research Courses		6
SOC 342	Social Research Methods	
ANT 351	Qualitative Research Methods	
Skills Classes (choose 2)		6
COM 201	Oral Communication	
COM 204	Interpersonal Communication	

COM 302	Small Group Communication	
ECO 311	Metropolitan Economic Development and GIS	
PSY 329	Leadership and Motivation	
PSC 237	State and Local Politics	
Four electives in your Focus - either Local (Urban) or Global		12
Local (urban) Focus electives		
HIS 382	New York State History	
HSV 300	Social and Cultural Diversity	
HSV 301	Social Policies ¹	
HSV 302	Children, Schools, and the Community	
PSC 237	State and Local Politics	
SOC 111	Contemporary Social Problems ¹	
SOC 340	Sociology of the City	
Global Focus		
ANT 122	Sociocultural Anthropology	
HIS 211	Women In The Western World	
HIS 356	Twentieth Century China	
HIS 358	Traditional Japan	
HIS 394	Modern Middle East	
PSC 241	Human Rights and Globalization	
HSV 300	Social and Cultural Diversity	
HSV 302	Children, Schools, and the Community	
Elective		3
One course from the other focus (either Local or Global)		
Total Credits		30

¹ Students may take either HSV 301 or SOC 111 but not both.

French Concentration

Code	Title	Credits
FRC 215	Intermediate French	3
FRC 217	Intermediate French II	3
FRC 323	Topics in Conversation I	3
FRC 324	French Composition through Literature	3
FRC 332	Substance and Style: Effective Writing in French	3
Five French electives		15
Total Credits		30

German Concentration

Code	Title	Credits
GER 215	Intermediate German I	3
GER 216	Intermediate German II	3
GER 323	Topics in Conversation I	3
GER 324	Topics in Conversation II	3
GER 331	Substance and Style: Effective Writing in German I	3
GER 332	Substance and Style: Effective Writing in German II	3
Four German electives		12
Total Credits		30

Spanish Concentration

Code	Title	Credits
SPA 215	Intermediate Spanish ¹	3
SPA 217	Introduction to Spanish Composition ¹	3

SPA 323	Topics in Conversation I: Peninsular Culture and Conversation	3
SPA 324	Topics in Conversation II: Latin American Culture and Civilization	3
SPA 332	Advanced Spanish Composition	3
Five Advanced-Level Spanish Classes		15
Total Credits		30

¹ Students who begin language study at the 300-level may substitute additional electives in lieu of the intermediate (200) level courses. Thus, students still will take 10 courses for the concentration.

LEARNING GOALS AND OBJECTIVES

Learning Goal 1 (KNOWLEDGE – Observed in Writing)

Candidates in the Teacher Education programs will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Teacher candidates will:

- Acquire knowledge of each student, and demonstrate knowledge of student development and learning to promote achievement for all students.
- Know the content they are responsible for teaching, and the pedagogical content knowledge to plan instruction that ensures growth and achievement for all students.

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)

Candidates in the Teacher Education programs will demonstrate professional skills and dispositions necessary for successful performance in their field.

Teacher candidates will:

- Demonstrate professional dispositions and implement instruction that engages and challenges all students to meet or exceed the learning standards.

Learning Goal 3 (SERVICE)

Candidates in the Teacher Education programs will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Teacher candidates will:

- Work with all students to create a dynamic learning environment that supports achievement and growth.
- Use multiple measures to assess and document student growth, evaluate instructional effectiveness, and modify instruction for diverse learners.

Learning Goal 4 (PROFESSIONALISM)

Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Teacher candidates will:

- Set informed goals and strive for continuous professional growth.

Learning Goal 5 (LEADERSHIP)

Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Teacher candidates will:

- Demonstrate professional responsibility and engage relevant stakeholders to maximize impact on student growth, development, and learning.

SPE 100 Introduction to Special Education 3 Credits

Presents the definitions, causes, psychological and behavioral characteristics of disabilities outlined in the IDEA. Emphasizes assessment procedures, multicultural issues, family involvement and the referral process.

SPE 291 Nature and Needs of CH Students with Learning Disabilities 3 Credits

Describes the effect of mild disabilities on childhood. Focuses on collaborative strategies for parental involvement. Highlights the CSE process, placement options and instructional strategies in grades one to six. Requires 20 hours field placement.

Prerequisite: SPE 100. **Corequisite:** SPE 292.

SPE 292 Remedial Strategies in the Childhood Content Areas 3 Credits

Describes appropriate techniques and materials for instruction to students with disabilities and those at risk of failure. Emphasizes assistive technology for students in childhood classrooms across the curriculum.

Prerequisite: SPE 100. **Corequisite:** SPE 291.

SPE 311 Nature/Needs of Childhood Students with Intellectual Disabilities & Autism Spectrum Disorders 3 Credits

Describes effects of MR and other developmental disabilities on childhood. Focuses on collaborative strategies for parental involvement. Highlights instructional strategies for grades 1-6 across the continuum of services. Requires 20 hours field placement.

Prerequisite: SPE 291 & SPE 292. **Corequisite:** SPE 312.

SPE 312 Multidisciplinary Assessment and Childhood Teaching 3 Credits

Emphasizes a multidisciplinary approach to meet the assessment and learning needs of childhood students with disabilities. Explores assessment and evaluation using the New York State Standards for Severe Disabilities and the Alternative Performance Indicators.

Prerequisite: SPE 291 & SPE 292. **Corequisite:** SPE 311.

SPE 330 Nature/Needs of Childhood Students with Behavioral Disorders 3 Credits

Describes the effect of Emotional and Behavioral Disorders on children and their families. Highlights NYSED Regulations, collaboration and instructional strategies to address academic and behavioral issues. Requires 20 hours of field placement.

Prerequisite: SPE 311 & SPE 312. **Corequisite:** SPE 335.

SPE 335 Classroom Management in Childhood Classrooms 3 Credits

Discusses implications of behavior management and importance of a proactive approach to prevent behavior problems. Emphasizes appropriate classroom structure, and individual and group contingencies to support children with E/BD in grades 1-6.

Prerequisite: SPE 311 & SPE 312. **Corequisite:** SPE 330.

SPE 432 Seminar in Teaching and Assessment 3 Credits

Includes practica and seminars that focus on professional reflection and topics related to classroom management, increasing family involvement, teaching to higher standards and assessment at the special education-childhood level. Requires 50 hours of field placement.

Fulfills College Core: Oral Communication

SPE 493 Supervised Student Teaching 12 Credits

Highlights knowledge, skills and dispositions of professional educators.

One full-time 7-week placement in each childhood and special education-childhood classroom requires candidates to become the instructional reader under the supervision of cooperating teachers and college faculty.

Prerequisite: signature, minimum GPA of 2.70, minimum grade of C in each required education course, some schools may require certain health tests.

Corequisite: EDU 494, EDU 497, & ECCH 494.

EDE 100 Human Growth and Development - Birth through Childhood 3 Credits

Introduces multiple dimensions of development including influence of family, culture and society. Examines physical, cognitive, emotional and behavioral theories and emphasizes education's role in promoting wellness.

Fulfills College Core: Field 5 (Social Sciences)

EDE 121 Introduction to Literacy, Children's Literature and the Arts 3 Credits

Focuses on the uses of children's books across all curriculum areas.

Multicultural literature, authors, illustrators, genres and age-appropriateness are explored. Discusses basic approaches to literacy and the use of children's books in developing literacy. Emphasizes integrating the arts into the total curriculum.

Offered: spring only.

EDE 311 Teaching Science in Elementary Schools 3 Credits

Addresses objectives, curriculum, strategies, materials and evaluation necessary for teaching science. Emphasizes content, inquiry skills, problem solving and scientific attitude highlighting the NY State Standards. Includes 20 hours of field experience in Grades 1-6.

Offered: spring only.

EDE 317 Teaching Math in Elementary Schools 3 Credits

Addresses objectives, curriculum, strategies, materials and evaluation necessary for teaching mathematical concepts. Emphasizes content, inquiry skills and problem solving highlighting the New York State Standards.

Offered: fall.

EDE 390 Cognition, Learning and Assessment - Birth through Childhood 3 Credits

Investigates theories of learning and current brain research. Integrates emotion and motivation and the neurological basis for learning. Analyzes formal and informal procedures for reporting student progress.

Offered: fall.

EDE 494 Capstone Seminar for Teacher Candidates 3 Credits

Complements student teaching for education majors. Includes activities that demonstrate how well teacher candidates can integrate theoretical principles and core attributes into the practical work of student teaching. Teacher candidates will complete readings, engage in classroom discussions and construct artifacts related to issues of diversity, ethics, global awareness and social justice. Each artifact will be presented and discussed in class and evaluated for content, effectiveness and illustration of specific core attributes.

Prerequisite: signature of chair. **Corequisite:** concurrent registration in student teaching.

Fulfills College Core: Core Capstone

EDU 122 Technology in Education 3 Credits

Explores applications of technology in education. Emphasizes evaluation and selection of software, high and low-tech devices, distance learning and state of the art technologies that impact teaching.

Offered: fall & spring.

EDU 250 Foundations of Education 3 Credits

Addresses social, philosophical, legal, historical, organizational, theoretical perspectives on education, including multicultural perspectives. Highlights rights and responsibilities of teachers, students and others involved in education.

Corequisite: EDU 495 & EDU 496.

Fulfills College Core: Justice

Offered: fall & spring.

EDU 495 Child Abuse Workshop 0 Credits

Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.

EDU 496 Prevention of School Violence Workshop 0 Credits

Mandatory training by New York State Education Department for teacher certification. Held during the student teaching seminar.

EDU 497 Dignity for All Students Act (DASA) Workshop 0 Credits

Provides six hours of training on the components of the Dignity Act, how school climate impacts students achievement and behavior, understanding diversity and multi-cultural environments, and understanding bullying, harassment and discrimination, including indicators, early warning signs, prevention and intervention and how to interact with families of victims and aggressors.

EDU 498 Student Teaching Seminar 3 Credits

Student Teaching Seminar enhances the student teaching experience through opportunities to foster professional growth and guided reflection on planning, instruction and assessment of learning. The course provides a professional learning community to assist candidates in the transition to careers in teaching.

Athletic Training

The information below only pertains to students that enrolled at Canisius in fall 2016 or earlier. Students will not be able to enroll or change into this major after fall 2016.

Chair: Peter M. Koehneke

INTRODUCTION

The Department of Kinesiology offers a Bachelor of Science degree with a major program in athletic training. The major is designed to prepare students to enter the athletic training and allied health fields. Emphasis is placed on the development of cognitive knowledge and psychomotor skills which includes practicum, laboratory and an internship experience. The major is accredited by the Commission on Accreditation of Athletic Training Education (CAATE) and prepares students for the Board of Certification (BOC) examination.

A degree in athletic training (AT) can be the key to an exciting career. Athletic trainers are skilled health care professionals who are involved in the prevention, diagnosis, management and rehabilitation of injuries and illnesses. Our nationally recognized program, taught by faculty members who also have earned national reputations, prepares students for the Board of Certification examination.

Students benefit from a very low student-teacher ratio, and thus a high degree of personal attention. Every semester, AT majors gain hands-on clinical experience which begins in the second year. Our students have a competitive edge in the job market, due to a culminating internship.

Athletic trainers are integral members of the health care team in high schools, colleges, sports medicine clinics, hospitals, physician offices and professional sports teams. Beyond the field of athletic training, our alumni

include physical therapists, podiatrists, physician assistants, chiropractors, physicians and secondary school teachers.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MAJOR EXPERIENCES

All applicants and students in the athletic training major must meet and continue to meet the professional standards of the program. No one who jeopardizes the health or well-being of a patient, classmate or him or herself will be accepted into the program or continue as a student in the program. All applicants and students must possess the necessary physical attributes and exhibit qualities of good judgment and emotional stability. Clinical sites may require a criminal background check prior to placement at the student's expense.

All applicants to the professional phase of the program are required to submit a written acknowledgment indicating that they have read and understood the technical standards related to the professional duties of the discipline. These documents are available on the program website. The athletic training program website also provides additional information for program applicants. The program faculty will be responsible for applying the standards for their students and prospective students. <http://www.canisius.edu/athletic-training/>.

The health care professional's self-presentation is a vital part of the complex relationship among the patient, the health care provider and the health care delivery site. The athletic training program reserves the right to limit attire and adornments (such as clothing, jewelry, piercing, tattooing) of the body, hands, face and oral cavity. The program handbook outlines the enforcement of this policy. In all cases, the final appeal may be made to the Chair of the Kinesiology Department.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in

some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

BIO 114 & 114L	Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
BIO 115 & 115L	Musculoskeletal Anatomy and Physiology and Musculoskeletal Anatomy and Physiology Laboratory	4
ATH 170	Emergency Care and Introduction to Athletic Training	3
HED 115	Basic Nutrition	3
HED 205	Wellness and Fitness	3
KIN 235	Kinesiology	3
KIN 336 & 336L	Physiology of Exercise and Physiology of Exercise Lab	4
ATH 132	Practicum in Athletic Training	2
ATH 231	Practicum in Athletic Training	1
ATH 232	Practicum in Athletic Training	1
ATH 261 & 261L	Diagnosis of Injuries/Illnesses I and Diagnosis of Injuries/Illnesses Lab	4
ATH 262 & 262L	Diagnosis of Injuries/Illnesses II and Diagnosis of Injuries/Illnesses II Lab	4
ATH 300	General Medical Diagnostics and Interventions	3
ATH 309	Pathophysiology and Pharmacology for Athletic Trainers	3
ATH 331	Practicum in Athletic Training	1
ATH 332	Practicum in Athletic Training	1
ATH 342 & 342L	Therapeutic Modalities and Therapeutic Modalities Lab	4
ATH 343 & 343L	Therapeutic Exercise and Therapeutic Exercise Lab	4
ATH 361	Psychology of Sport and Mental Health	3
ATH 372	Health Issues for Athletic Trainers	3
ATH 398	Statistics and Research Design	3
ATH 431	Practicum in Athletic Training	3
ATH 482	Administration of Athletic Training	3
ATH 498	Internship in Athletic Training	3
Total Credits		70

ADDITIONAL COURSE CONSIDERATIONS

Athletic Training majors should consult their advisor for additional course considerations.

Recommended Semester Schedule for Major Course Requirements:

Freshman	
Fall	Spring
BIO 114 & 114L	BIO 115 & 115L
ATH 170	ATH 132
FYS 101	ENG 101
PHI 101	RST 101
Core	Core
	Core
Sophomore	
Fall	Spring
ATH 231	ATH 232
ATH 261 & 261L	ATH 262 & 262L
ATH 342 & 342L	ATH 343 & 343L
KIN 235	HED 205
Core	Core
Core	Core
Junior	
Fall	Spring
KIN 336 & 336L	ATH 332
ATH 309	ATH 361
ATH 331	ATH 398
ATH 372	HED 115
Core	Core
Elective	ATH 300
Senior	
Fall	Spring
ATH 431	ATH 482
Core	ATH 498
Core	Capstone
Elective	Elective
Elective	Elective

LEARNING GOALS & OBJECTIVES

Learning Goal 1 (KNOWLEDGE – Observed in Writing)

Candidates in the Athletic Training program will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Students will:

- Demonstrate knowledge of how to prevent injury and manage risk of injuries/illnesses
- Recognize the nature and diagnosing extent of injuries/illness

- Demonstrate knowledge of acute injuries/illnesses
- Demonstrate knowledge of athletic training practice in various practice settings, or post professional education programs

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)

Candidates in the Athletic Training program will demonstrate professional skills and dispositions necessary for successful performance in their field.

Students will:

- Recognize the nature and diagnosing extent of injuries/illness
- Manage acute injuries/illnesses
- Implement treatment and rehabilitation protocols and reconditioning programs

Learning Goal 3 (SERVICE)

Candidates in the Athletic Training program will demonstrate willingness to use their skills to benefit and serve society.

Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Students will:

- Identify cultural and diversity awareness in patient populations

Learning Goal 4 (PROFESSIONALISM)

Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Students will:

- Use self-reflection to assess and refine professional practice

Learning Goal 5 (LEADERSHIP)

Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

- Strength and Conditioning Minor (p. 315)

The Strength and Conditioning minor is common minor for athletic training students, human services major and physical education majors, although it is open to any student with the prerequisites. The minor provides students with preparation for the fields of strength and conditioning, wellness, and for related graduate work. It also helps students prepare for specialty certifications through the American College of Sports Medicine, the National Strength and Conditioning Association and the National Academy of Sports Medicine. Strength and conditioning courses have specific prerequisites, which are stated in the course descriptions.

Admission to the Strength and Conditioning minor is competitive due to a limited number of student slots available and is based on skills and knowledge competencies acquired in BIO 114 and lab, BIO 115 and lab, and KIN 235. Each course must be completed with a grade of C (2.0) or higher. The applicant must attain a minimum C (2.0) cumulative GPA in these five courses and an overall college GPA of C (2.0) or higher. Majors from other departments are eligible for selection by meeting the above requirements. Students interested in the Strength and Conditioning minor at Canisius

College must complete a Change of Major/Minor form. Application for the minor must be completed following enrollment in KIN 235.

ATH 132 Practicum in Athletic Training 2 Credits

Didactic and psychomotor skill instruction with practical examinations. Examinations are an integral portion of the acceptance criteria for the program.

Prerequisite: minimum grade of C in both BIO 114 & BIO 114L, and minimum overall GPA of 2.0.

Offered: spring 2017 only.

ATH 170 Emergency Care and Introduction to Athletic Training 3 Credits

Recognition and immediate care of common illnesses and injuries. Introduction to the profession of Athletic Training.

Offered: fall 2016 Only.

ATH 231 Practicum in Athletic Training 1 Credit

Clinical experiences in athletic training. Instruction provided by professionals from various academic institutions, e.g., secondary schools and colleges. Experiences and course material provide acquisition of clinical competency of previously instructed psychomotor skills.

Prerequisite: minimum grade of C in ATH 132. **Restriction:** acceptance into the athletic training education program.

Offered: fall.

ATH 232 Practicum in Athletic Training 1 Credit

Clinical experiences in athletic training. Instruction provided by professionals from various academic institutions, e.g., secondary schools and colleges. Experiences and course material provide acquisition of clinical competency of previously instructed psychomotor skills.

Prerequisite: minimum grade of C in ATH 231.

Offered: spring.

ATH 261 Diagnosis of Injuries/Illnesses I 3 Credits

Theoretical, practical, empirical study of lower extremity, lumbar spine diagnosis and associated illnesses.

Prerequisite: minimum grade of C in ATH 132. **Corequisite:** ATH 231 & ATH 261L.

Offered: fall.

ATH 261L Diagnosis of Injuries/Illnesses Lab 1 Credit

Laboratory to accompany ATH 261.

Offered: fall.

ATH 262 Diagnosis of Injuries/Illnesses II 3 Credits

Theoretical, practical, empirical study of upper extremity, thorax, head and cervical spine diagnosis and associated illnesses.

Prerequisite: minimum grade of C in both ATH 231 & ATH 261. **Corequisite:** ATH 232 & ATH 262L.

Offered: spring.

ATH 262L Diagnosis of Injuries/Illnesses II Lab 1 Credit

Laboratory to accompany ATH 262.

Offered: spring.

ATH 300 General Medical Diagnostics and Interventions 3 Credits

Theoretical, practical, empirical study of general medical conditions, commonly used diagnostics and interventions for the athletic trainer.

Prerequisite: minimum grade of C in both ATH 231 & ATH 261.

Offered: spring of even-numbered years.

ATH 309 Pathophysiology and Pharmacology for Athletic Trainers 3 Credits

Discussion of the physiologic changes that occur following injuries and illness. Discussion of indications, contraindications and legal issues regarding medications used in the management of athletic injuries.

Corequisite: ATH 231 or ATH 331.

Offered: fall of even numbered years.

ATH 331 Practicum in Athletic Training 1 Credit

Clinical experiences in athletic training. Instruction provided by professionals from various academic institutions, e.g., secondary schools and colleges. Experiences and course material provide acquisition of clinical competency of previously instructed psychomotor skills.

Prerequisite: minimum grade of C in ATH 232.

Offered: fall.

ATH 332 Practicum in Athletic Training 1 Credit

Clinical experiences in athletic training. Instruction provided by professionals from various academic institutions, e.g., secondary schools and colleges. Experiences and course material provide acquisition of clinical competency of previously instructed psychomotor skills.

Prerequisite: minimum grade of C in ATH 331.

Offered: spring.

ATH 342 Therapeutic Modalities 3 Credits

Therapeutic modality use in treatment of orthopedic injuries. Physics, physiological effects, rationale and application of modalities in health care of patients. Practical examinations.

Prerequisite: minimum grade of C in ATH 132. **Corequisite:** ATH 231 & ATH 342L.

Offered: fall.

ATH 342L Therapeutic Modalities Lab 1 Credit

Laboratory to accompany ATH 342.

Corequisite: ATH 342.

Offered: fall.

ATH 343 Therapeutic Exercise 3 Credits

Contemporary exercise and clinical intervention techniques used in the management of orthopedic injuries. Biomechanics, physiological effects, rationale and application of exercise techniques and devices. Practical examination.

Prerequisite: minimum grade of C in KIN 235. **Corequisite:** ATH 232 & ATH 343L.

Offered: spring.

ATH 343L Therapeutic Exercise Lab 1 Credit

Laboratory to accompany ATH 343.

Corequisite: ATH 343.

Offered: spring.

ATH 361 Psychology of Sport and Mental Health 3 Credits

This course address sport psychology from a sports studies perspective incorporating interdisciplinary knowledge from the social sciences. It is an appropriate approach for many students seeking to understand the psychological processes facing athletes in a competitive environment. Considerable interest surrounds the efforts of sport psychologists to optimize the performance of those characters we call athletes - the sport heroes of our society. Superior athletic performance has long held great intrigue. Tremendous improvements in the identification and measurement of the psychological factors related to athletic performance have resulted in significant improvements in an athlete's ability to produce top level performance on a consistent basis. This course focuses on the application of these psychological principles by athletes, coaches and sport psychology consultants in what has been a quest to produce the ultimate athlete/.

Fulfills College Core: Field 5 (Social Sciences)

Offered: fall & spring.

ATH 372 Health Issues for Athletic Trainers 3 Credits

Current content and practices related to personal, school and community health as it relates to the management of injury and illness.

Offered: fall of odd numbered years.

ATH 398 Statistics and Research Design 3 Credits

Application and interpretation of descriptive and inferential statistics. Library search techniques and research design as related to evidence based practice. Includes the use of statistical software, data collection, and creation and presentation of a research poster.

Prerequisite: minimum grade of C in KIN 235.

Fulfills College Core: Field 7 (Mathematical Sciences)

Offered: fall & spring.

ATH 431 Practicum in Athletic Training 3 Credits

Clinical experiences in athletic training. Instruction provided by professionals from various academic institutions, e.g., secondary schools and colleges. Experiences and course material provide acquisition of clinical competency of previously instructed psychomotor skills.

Prerequisite: minimum grade of C in ATH 232. **Restriction:** acceptance into the athletic training education program.

Offered: fall.

ATH 482 Administration of Athletic Training 3 Credits

Theoretical, practical and empirical study of administrative requirements of the athletic trainer relative to facility design, duties, liability, drug testing, nomenclature and injury epidemiology.

Prerequisite: minimum grade of C in both ATH 231 & ATH 261.

Offered: spring of even-numbered years.

ATH 498 Internship in Athletic Training 3 Credits

Field-based experience in athletic training or related health care field. Requires 150 clock hours over twelve weeks.

Prerequisites: ATH 331 grades of C or above, Permission of Chair then Associate Dean. Fall/Spring/ Summer

Health and Wellness

Chair: Peter Koehneke

Director: Charles Pelitera

INTRODUCTION

The major will provide a Bachelor of Science degree that will allow graduates the opportunity to be employed in facilities offering personal health and fitness programs ranging from health clubs and corporate fitness/wellness to physician-based wellness programs. Student eligibility for certification through organizations such as the National Strength and Conditioning Association, American College of Sports Medicine, National Academy of Sports Medicine and American Council on Exercise will be available following completion of the degree. Additionally, a minor in an area such as business could allow the student to pursue management positions in the fitness industry or lead them into areas related to sport administration. More information about opportunities for students is available at the program website (<https://www.canisius.edu/academics/programs/health-wellness>).

Many students in health and exercise-related fields go on to graduate school. Students in this major may take electives to meet competitive admissions requirements for graduate programs in related fields. Through the use of guided electives, students will have the ability to complete pre-requisites for other health care professions. Examples include professions such as physical therapy, chiropractic, physician's assistant, and for an exceptional few medical school.

Admission to these graduate programs is extremely competitive and requires a strong academic record and standardized test results and many programs also expect evidence of leadership, service/volunteerism, written and oral communication skills and a working knowledge of the health profession. Students must work closely with the Canisius College Pre-Med

director for advisement and the professional school of interest to determine the curriculum electives needed to satisfy necessary prerequisites.

QUALIFICATIONS

Students must achieve a C or above in the following courses: BIO 114 and lab, BIO 115 and lab, ATH 170, HED 205, HED 337 and KIN 235 and also maintain a 2.3 GPA in their major and a 2.3 overall average to graduate with a degree in Health and Wellness. All students must complete a minimum of 120 credit hours to graduate.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

Students interested in graduate work in a pre-professional program (Physical Therapy, Chiropractic, Occupational Therapy, Physician's Assistant, etc.) should seek advisement through the Canisius College Pre-Med director in addition to the major advisor.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

BIO 114 & 114L	Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
BIO 115 & 115L	Musculoskeletal Anatomy and Physiology and Musculoskeletal Anatomy and Physiology Laboratory	4
KIN 170	Emergency Care	3
HED 205	Wellness and Fitness	3
KIN 235	Kinesiology	3
HED 115	Basic Nutrition	3
PSY 101	Introduction to Psychology I	3
PSY 102	Introduction to Psychology II	3
HED 220	Healthy Behaviors	3
KIN 336 & 336L	Physiology of Exercise and Physiology of Exercise Lab	4
HED 337	Exercise Principles and Applications	3
HED 361	Psychology of Sport and Mental Health	3
HED 425	Evolution of Disease and Illness	3
ATH 398	Statistics and Research Design	3
KIN 350	Organization and Administration of Health and Wellness	3
KIN 498	Internship in Health and Wellness (240 required hours)	6
Total Credits		54

MAJOR ELECTIVES

Health and Wellness majors should consult their advisor to identify free electives that might complement the major requirements.

MAJOR EXPERIENCES

All students in the health and wellness major must meet and continue to meet the professional standards of the program. No one who jeopardizes the health or well-being of a client/patient, classmate or him or herself will continue as a student in the program. All students must possess the necessary physical attributes and exhibit qualities of good judgment and emotional stability.

The Health and Wellness program reserves the right to limit attire and adornments (such as clothing, jewelry, piercing, tattooing) of the body, hands, face, and oral cavity. The program assessment handbook outlines the enforcement of this policy. In all cases, the final appeal may be made to the Department of Kinesiology chair.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
BIO 114 & 114L	BIO 115 & 115L
HED 115	KIN 170
FYS 101	ENG 101

Field 3 or 4	Field 3 or 4
Elective	Elective
Sophomore	
Fall	Spring
KIN 235	PHI 101
PSY 101	HED 205
RST 101	HED 425
HED 220	PSY 102
Elective	Elective
Junior	
Fall	Spring
KIN 336 & 336L	HED 361
Field 1 or 2	
Attribute	ATH 398
Attribute	Field 1 or 2
Attribute	HED 337
Elective	Elective
Senior	
Fall	Spring
KIN 350	KIN 498
Elective	Core Capstone
Elective	Elective
Elective	Elective

ADDITIONAL COURSE CONSIDERATIONS

Health and Wellness majors should consult their advisor for additional course considerations.

LEARNING GOALS AND OBJECTIVES

Learning Goal 1 (KNOWLEDGE – Observed in Writing)

Candidates in the Health and Wellness program will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Students will:

- Identify and appraise the content of appropriate health information, services and products.
- Assess health behaviors related to fitness, nutrition, relationships, substance use and abuse, and the environment.
- Interpret the scientific literature in regard to aspects of human nutrition.
- Describe how disease and illness affects the various body systems.

Learning Goal 2 (KNOWLEDGE – Observed Skills and Dispositions)

Candidates in the Health and Wellness program will demonstrate professional skills and dispositions necessary for successful performance in their field.

Students will:

- Design and implement an exercise program for an individual client.

- Develop an exercise progression for a team that reduces risk and maximizes benefit.
- Utilize the epidemiological model of disease and disorders by examining predisposing factors, symptoms, preventions, treatment and control.

Learning Goal 3 (SERVICE)

Candidates in the Health and Wellness programs will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Students will:

- Design and implement an exercise program for an individual client.
- Develop an exercise progression for a team that reduces risk and maximizes benefit.
- Demonstrate the ability to modify exercise programs based on age, skill, setting, specificity and progress.

Learning Goal 4 (PROFESSIONALISM)

Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Students will:

- Demonstrate and instruct on standardized testing techniques involved in fitness assessment.
- Demonstrate and instruct proper functional movements involved in strength and conditioning.

Learning Goal 5 (LEADERSHIP)

Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Students will:

- Students will develop confidence and proficiency in their ability to communicate health related information through oral communication.
- Students will develop confidence and proficiency in their ability to communicate health related information through written communication.

Health and Wellness students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. Students must complete the appropriate minor request form.

The Strength and Conditioning minor is a common minor for health and wellness students. The minor provides students with preparation for the fields of strength and conditioning, wellness, and for related graduate work. It also helps students prepare for specialty certifications through the

National Strength and Conditioning Association, the American College of Sports Medicine and the National Academy of Sports Medicine. Strength and conditioning courses have specific pre-requisites, which are stated in the course descriptions.

Admission to the Strength and Conditioning minor is competitive due to a limited number of student slots available and is based on skills and knowledge competencies acquired in BIO 114 and lab, BIO 115 and lab, and KIN 235. Each course must be completed with a grade of C (2.0) or higher. The applicant must attain a minimum C (2.0) cumulative GPA in these five courses and an overall college GPA of C (2.0) or higher. Majors from other departments are eligible for selection by meeting the above requirements. Students interested in the Strength and Conditioning minor at Canisius College must complete a Change of Major/Minor form. Application for the minor must be completed following enrollment in KIN 235.

Strength and Conditioning Minor Courses

BIO 114 & 114L	Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
BIO 115 & 115L	Musculoskeletal Anatomy and Physiology and Musculoskeletal Anatomy and Physiology Laboratory	4
KIN 235	Kinesiology	3
KIN 336	Physiology of Exercise	3
HED 337	Exercise Principles and Applications	3
HED 115	Basic Nutrition	3
PED 365	Principles and Philosophy of Coaching	3
KIN 420	Strength & Conditioning Applications	3
Total Credits		26

Note: Dr. Karl Kozlowski and Dr. Chuck Pelitera serve as advisors for the Strength and Conditioning minor program in the Department of Kinesiology.

Human Services

Director: Robert Nida, PhD

INTRODUCTION

The field of human services is an applied academic discipline that involves the study of social systems with the goal of finding solutions to prevent and remediate human problems. The discipline seeks to meet basic human needs and advocate for change in societal systems that affect the lives of individuals. In accordance with these goals, the Human Services program is designed to prepare students for professional work in the public, private, non-profit, and for-profit sectors. A degree in Human Services also enables students to pursue graduate studies in social work, counseling, public policy, public administration, and other social sciences programs.

The course work in the major is based on sound theory and research and offers a broad and coherent foundation of knowledge in the discipline. Students have the opportunity to take field-based coursework through practica and supervised internships within human service agencies. The program also offers flexibility, in that students are permitted to choose from one of two tracks:

- Schools and Community
- Child, Youth and Family Development

Please see the department's website (<https://www.canisius.edu/academics/programs/human-services>) for a more detailed description of the program, faculty, facilities, academic and co-curricular opportunities.

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in human Services. All students must complete a minimum of 120 credit hours to graduate.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

DUAL DEGREE PROGRAM

Students in the Human Services program can pursue a 4+1 program that leads to both the BS in Human Services and an MS in Communication and Leadership after 5 years of study. The dual degree program (p. 320) involves taking graduate courses in the student's senior year to begin the master's program before completing the undergraduate degree. Students should work with advisors in both Human Services and Communication and Leadership to plan their courses of studies.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

All Human Services Majors

HSV 200	Introduction to Human Services	3
HSV 201	Introduction to Family Dynamics	3
COM 204	Interpersonal Communication	3
EDE 100	Human Growth and Development - Birth through Childhood	3
or EDS 101	Human Growth and Social Development: Adolescence	
HSV 300	Social and Cultural Diversity	3
HSV 301	Social Policies	3
EDU 250	Foundations of Education	3
HSV 302	Children, Schools, and the Community	3
HSV 400	Management of Human Service Agencies	3
HSV 450	Research in Human Services	3
HSV 498	Practicum in Human Services	3
HSV 495	Field Internship	6
HSV 480	Wellness - Be All That You Can Be	3
Electives: 4 major electives from tracks listed below		12
Total Credits		54

Major Electives

In addition to the required courses, you need to choose one of two tracks: schools and community, or child, youth and family development. Each track requires the completion of four (4) electives in that specific area. Exceptions can be made in consultation with the program director.

Schools and Community

EDU 122	Technology in Education	3
ECCH 221	Literacy I	3
ECCH 222	Literacy II	3
EMC 352	Human Growth and Social Development: Middle Childhood	3
EDE 311	Teaching Science in Elementary Schools	3
EDE 317	Teaching Math in Elementary Schools	3
SPE 341	Inclusive Strategies	3
ECCH 412	Managing the Early Childhood and Elementary Classroom	3
EDS 360	Evaluation and Teaching Strategies	3
EDS 402	Methods of Teaching English: Adolescence	3
EDS 403	Methods of Teaching Mathematics: Adolescence	3
EDS 404	Methods of Teaching Modern Languages: Adolescence	3
EDS 405	Methods of Teaching Science: Adolescence	3
EDS 406	Methods of Teaching Social Studies: Adolescence	3
PSY 334	Child, Family and Community Psychology	3

Child, Youth, and Family Development

EMC 352	Human Growth and Social Development: Middle Childhood	3
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PSY 384	Child & Adolescent Psychopathology	3
PSY 307	Adolescent Psychology	3
CRJ 337	Violence and the Family	3
CRJ 354	Juvenile Delinquency	3
COM 205	Mass Communication and Society	3
COM 304	Family Communication	3

MAJOR EXPERIENCES

Example: Human Services majors are encouraged to become active members in the service opportunities provided on campus. Service opportunities include joining the Griffins Giving Back club and attending service trips both domestically and internationally through our Campus Ministry office. Getting involved with organizations such as these can increase one’s awareness of the social problems impacting our society and obtain first-hand experience with the fields they may choose to enter.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman	
Fall	Spring
HSV 200	HSV 201
Sophomore	
Fall	Spring
EDE 100	HSV 300
EDU 250	
COM 204	
Junior	
Fall	Spring
HSV 301	HSV 302
HSV 450	HSV 498
Major Elective	Major Elective
Major Elective	
Senior	
Fall	Spring
HSV 480 (Capstone)	HSV 495
HSV 400	
Major Elective	

LEARNING GOALS AND OBJECTIVES

Learning Goal 1: Candidates in the Human Services Program will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Students will:

- Demonstrate knowledge of the basic concepts and theories of the field of human services
- Demonstrate knowledge of research methodologies used in the field of human services
- Demonstrate and understanding of how individuals, families, and cultures function in society and the relationships among societal structures.

Learning Goal 2: Candidates in SEHS programs will demonstrate professional skills and dispositions necessary for successful performance in their field.

Students will:

- Apply human services concepts and theories to specific problems of human society
- Apply quantitative and qualitative research methodologies to solve problems in society
- Demonstrate good people helping and communication skills
- Demonstrate effective leadership skills

Learning Goal 3: Candidates in SEHS programs will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Students will:

- Actualize the Canisius College Jesuit mission by providing “cura personalis” to clients of human service agencies
- Understand how personal and societal change takes place and how to facilitate change in a constructive way
- Acquire and apply ethical and moral decision making practices in the field of human services.
- Demonstrate best practices in the field of human services

Learning Goal 4: Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Students will:

- Learn evidence-based intervention strategies in the field of human services
- Learn evidence-based assessment instruments to measure program quality and to use the evidence to make effective changes in professional practice
- Learn fundamentals of designing and managing professional agencies and how to adapt in response to individual, familial, and societal demands.

Learning Goal 5: Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community

Students will:

- Demonstrate the ability to reflectively connect their efforts to the success and well-being of those that they serve.

HSV 200 Introduction to Human Services 3 Credits

This course explores the historical context and the current structure and function of the field of human services. The student will become knowledgeable about the many roles and functions of human service professionals and the primary intervention strategies utilized in the field. The special populations served in the human services profession will be examined. Various topics include the bio-ecological systems theory, values and ethical dilemmas, the social welfare system, human diversity, legal issues, program planning and organization, agency administration, and people helping skills.

HSV 201 Introduction to Family Dynamics 3 Credits

This course consists of an overview of the dynamics of family relationships and issues related to families and relationships. The purpose of this course is to provide students with a basic understanding of family theory and an introduction to systematic approaches and techniques when working with couples and families. This didactic class includes lecture and PowerPoint presentations, videos and demonstrations, small group discussions, whole class discussions, and written assignments.

HSV 300 Social and Cultural Diversity 3 Credits

This course is designed to address contemporary issues of cultural and social diversity in the United States. Its main goal is to help students develop through understanding of how social and cultural diversity impacts one's life. It also emphasizes the importance of becoming a culturally and socially competent person to better serve the needs of an increasingly globalized society.

HSV 301 Social Policies 3 Credits

This course examines the characteristics of social policy in general and in education in particular. Special attention is given to policy development and implementation in relation to its effects on underprivileged populations in U.S. society. Within a historical and political context, current social policies are examined in terms of their underlying assumptions and values as well as their ethical implications. Strengths and weaknesses of current policies are also analyzed. Policies under consideration include agency policies, local ordinances, state and federal legislation, and global trends.

Fulfills College Core: Ethics, Field 5 (Social Sciences)

HSV 302 Children, Schools, and the Community 3 Credits

This course is designed to examine the contexts in which a child develops, the relationships of the people in them, and the interactions that take place within and between contexts. There is growing consensus that the needs of children and families must be understood from an integrated systems perspective (i.e., ecological systems theory). The welfare of children is highly interrelated to their families' well-being. Families, irrespective of culture or social class, cannot be separated from the broader social systems within which they are embedded. These major systems include informal support systems (e.g. friends, neighbors, and relatives) in addition to formal support systems, such as those relating to health, education, employment, religion, recreation, housing, and social welfare.

HSV 400 Management of Human Service Agencies 3 Credits

This course examines the fundamentals of program development and administration of human services organizations. Emphasis will be placed on program structure, planning, strategies, and evaluation. There is a growing need for human services students to be exposed to managerial and supervisory issues relative to the operation of community agencies. This course will provide students with classroom instruction and practicum experience in a community agency.

HSV 450 Research in Human Services 3 Credits

Students will develop an understanding of the research process by learning how to formulate a research problem, design a study, use appropriate methods of data analysis, and interpret research findings. Students will learn how to critically analyze research studies, discuss ethical considerations in conducting research, and discuss the importance of scientific research for educational policy and practice. Each student will conduct an original research study and present their findings to demonstrate understanding of the research process.

HSV 480 Wellness - Be All That You Can Be 3 Credits

This course explores the many issues related to personal well-being. Wellness is regarded as a healthy balance between mind, body, and spirit. According to the National Wellness Institute, wellness is a process by which we actively seek to optimize ourselves occupationally, physically, socially, intellectually, spiritually, and emotionally. Approaches to wellness exist in most fields involving human services such as counseling, medicine, education, and management. Components of wellness include healthy food, clean environments, regular exercise, adequate rest, safe living conditions, productive work, balancing work and family, and spiritual awareness. What does it take to reach our potential? What are obstacles to wellness? How can wellness exist in nations that have few opportunities for healthy eating, productive work, or sanitary living conditions?

Fulfills College Core: Core Capstone

HSV 495 Field Internship 6 Credits

The required six-credit internship provides students with a professionally supervised field experience in a human service agency. During the internship experience, students will have the opportunity to apply theory and knowledge of the work environment and to expand their professional practice skills. Students will have the opportunity to develop client communication skills, cultural competence and will learn to infuse their practice with ethics and professionalism.

HSV 498 Practicum in Human Services 3 Credits

Student experientially learns human service functions in compatibly matched professional setting. Faculty and on-site supervision. Pass/fail. Applications on Department website.

Prerequisite: junior or senior standing, minimum overall GPA of 2.50, minimum human services average of 2.70, & approval by department faculty.
Restriction: must be human services (HSV) major.

Dual Degree in Human Services and Communication and Leadership

This program provides students with a BS degree in Human Services and a MS degree in Communication & Leadership. Officially, this is a 4+1 program that allows students to graduate with the BS after 4 years and the MS after a 5th year, because the student begins taking graduate courses in the undergraduate senior year.

The MS in Communication and Leadership program carries out the essence of the college mission and goals: transformative learning experiences, engagement in service learning, and values core to the Jesuit mission of service for others. The foundation of the curriculum is theory that provides the framework from which students apply practical experience through course work projects, learning partnerships in the community and research papers. The student experience is grounded in the Jesuit ideal of "men and women for others." Course learning moves beyond the classroom by partnering with external organizations to create projects that apply concepts learned in the classroom. The Managing Not for Profit

Organizations concentration has project based experiences requiring the application of course content and theory into practice service based projects (AKA transformative learning experiences).

4+1 Program Highlights

- Ability to earn a MS degree in half the time
- Cost effective save on overall tuition costs
- Students eligible for financial aid in their senior year
- Maintain continuity with faculty and Canisius College
- Increase your earning potential with a graduate degree
- Receive the same coursework as the two-year students
- Gain a competitive edge in the marketplace and increase your earning potential
- Theory to practice focus –service to community nonprofits as you learn

Basics of the Program:

The M.S in Communication and Leadership 4+1 program works in conjunction with the undergraduate BS in Human Services Program. Students graduate with their Bachelor's degree in Human Services and their Master's degree in Communication and Leadership with a concentration in Managing Not-for-Profit Organizations in just 5 years.

The Communication and Leadership program is designed to address how communicative behaviors create and alter organizational processes and how organizations in which individuals interact affect communicative behaviors. Persuasion and other communication skills are strong predictors of performance, often more significant than both intelligence and personality traits.

Mission Statement:

In keeping with the Jesuit tradition and the Canisius mission and goals, the MS graduate program in Communication and Leadership provides quality education with a strong commitment to academic excellence. We work to create opportunities for personal growth experiences. Such an environment actively engages faculty and students in the continuous process of teaching, learning and service to others. The Communication and Leadership curriculum encourages critical thinking and intellectual growth within a spiritual, moral and ethical frame.

Academic Excellence

The faculty in the Communication and Leadership program are committed to academic excellence, providing students with a quality education and creating personal growth opportunities.

Care of the Individual

Small class sizes facilitate an environment in which a dedicated faculty maintains focus on individual needs in order to attain success.

Expert Faculty

A combination of respected academics and recognized business professionals as adjuncts provides each student with the maximum learning experience.

Canisius Network

Alumni are devoted to the success of Canisius and its students while the college focuses on continuing to develop strong relationships with classmates, faculty and administration.

ADMISSION

Application to graduate program director by spring of junior year undergraduate. Students must have an overall GPA of 3.0 or higher to apply

to the program, a GPA of 3.2 or higher waives GRE requirement to enter program.

Students must maintain a 3.0 GPA to remain in the program.

Prospective students must be a student in the Human Services baccalaureate degree program, entering their senior year in order to be eligible for the 4+1 admittance. The BS in Human Services must be the student's major field of study, and must present evidence of their qualifications to participate fully in a graduate level endeavor. The Admissions Committee evaluates applicants on the basis of academic records with a minimum undergraduate GPA 3.0, scores on the Graduate Record Exam (GRE) or Graduate Management Admissions Test (GMAT), professional accomplishments and subjective appraisal of motivation and the likelihood of successful program completion.

To qualify for admission, the student needs the following:

- Completed either a GRE exam (<http://www.ets.org/gre>) or a GMAT exam (<http://www.mba.com/the-gmat.aspx>).
- Application for admission to the 4+1 program, to the program director, by March 15 of the junior year of undergraduate studies in the BS in Human Services program.
- Minimum undergraduate GPA of 3.0 or higher
- Proof of successful completion of a baccalaureate degree from an accredited college or university, regardless of major field of study

AND

- For international students or for applicants whose native language is not English, a completed TOEFL examination or IELTS exam is required (as well as the appropriate undergraduate credentials).

The Admissions Committee recognizes that an applicant's background and experience may enhance the ability to succeed in this program. Those individuals who wish to have these experiences considered in the admission decision may submit letters of reference and/or information pertaining to such experience with the application form.

The Admissions Committee recognizes that some applicants may wish to begin the program prior to taking the GMAT or GRE. A program candidate whose QPA is 3.00 or higher may be admitted to the program as a provisionally accepted student for one academic semester. A student may take no more than nine semester hours of course work on a provisional basis. Candidates may also be accepted as a non-matriculating student eligible to complete nine credit hours of course work.

In order to apply, applicants need to complete an application form, have their GMAT, GRE and TOEFL scores or IELTS scores if applicant is an international student forwarded from the testing service, provide two official transcripts of all college work, write a brief essay describing their interest in the Communication and Leadership program, and submit such other information as requested by the Graduate Admissions Office.

Eligible students will begin coursework in the fall of their Senior year of study. Students will need to enroll in summer classes to complete the program within a year after completing their undergraduate studies.

ACADEMIC STANDARDS

Students must maintain a 3.0 grade point average (a B average) to remain in good standing.

Students must be in good standing with a 3.0 cumulative average to be eligible to take the capstone course.

To receive the MS degree in Communication and Leadership, students must maintain a 3.0 QPA.

Any student receiving less than a C+ grade in two or more courses will be dismissed from the program.

Academic Probation

A student is placed on academic probation if:

- After completion of nine hours of course work, the student's cumulative grade point average falls below a 2.7.

OR

- Any time after completion of nine or more hours of course work, the cumulative grade point average is less than 3.0.

A student may not be placed on academic probation more than twice.

A student may be dismissed from the program if:

- After completion of six hours of course work subsequent to being placed on academic probation, the cumulative grade point average is less than 3.0.

OR

- After completion of a second semester on academic probation, the student fails to meet the minimum QPA of 3.0. Two semester of academic probation include both consecutive and non-consecutive semesters.

All students must:

- Meet the requirements stated in the graduate handbook for entry into the program.
- Assume the responsibility of acquainting themselves with all requirements pertaining to the program of study and adhering to them.
- Assume the responsibility of being familiar with their academic standing and the consequences connected to academic policy and procedures.

NOTE: For the purpose of these policies, an average, which includes all graduate coursework, is computed according to the values listed in the Academic Procedures section.

MS in Communication and Leadership with Concentration in Managing Not-for-Profit Organizations

Leaders in not-for-profit organizations must meet the challenges of fundraising, long-range planning and development in a time where competition for resources is increasing. This concentration blends theory and practice to promote learning.

- Students will work with not for profit organizations in collaborative partnerships.
- Some examples of partnering organizations are: Theodore Roosevelt Inaugural Site, Buffalo Museum of Science, Vocalis Chamber Choir, Frank Lloyd Wright Fontana, Save the Michaels of the World, and the Niagara Aquarium.

Required Core Courses

COM 602	Organizational Communication	3
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COM 604	Persuasion and Social Influence	3
COM 610	Leadership	3
COM 605	Research Methods: Measurement and Analysis (fall only, last year of coursework)	3
MBA 502	Leadership in Organizational Behavior (prerequisite for all other MBA courses)	3
COM 699	Capstone Project (spring only, last semester of coursework;)	3
Not-for-Profit Concentration		
COM 615	Partnerships and the Not-for-Profit Organization	3
COM 616	Fund Raising and Development at Not-for-Profit Organizations	3
COM 618	Seminar: Special Topics and Not-for-Profit Organizations	3
COM 621	Integrated Marketing Communication	3

LEARNING GOALS & OBJECTIVES

Learning Goal 1

Students will develop a capacity for thinking critically about leadership behaviors and understanding how leadership theories relate to life.

Students will:

- **Objective A:** Demonstrate knowledge of classical and contemporary theories of leadership and demonstrate the application of these theories to everyday life.

Learning Goal 2

Students will enhance their understanding of the communication process and be able to construct effective messages.

Students will:

- **Objective A:** Demonstrate communication competency in written format;
- **Objective B:** Demonstrate communication competency in oral format;
- **Objective C:** Demonstrate an understanding of communication theory;
- **Objective D:** Connect communication theory to everyday practice.

Learning Goal 3

Students will develop enhanced critical thinking skills.

Students will:

- **Objective A:** Synthesize a body of knowledge in the communication field and illustrate an understanding of that body of knowledge;
- **Objective B:** Design a new area of inquiry based on a body of communication research;
- **Objective C:** Analyze communication research; make inferences about the analysis using supporting evidence;
- **Objective D:** Apply knowledge by judging the value of the information.

Physical Education Sport Studies

Chair: Peter M. Koehneke

Coordinator: Greg Reeds, Ed.D.

INTRODUCTION

The physical education major may wish to pursue a career other than teaching. Several options are available to prepare students for professional careers or graduate training. Students may obtain a bachelor of science

degree in Physical Education and Sport Studies (<https://www.canisius.edu/academics/programs/physical-education-sport-studies>). The Physical Education Sport Studies degree does not lead to teacher certification.

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Physical Education Sport Studies. All students must complete a minimum of 120 credit hours to graduate.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

SPMT 150	Introduction to Sport Management	3
HED 205	Wellness and Fitness	3
HED 220	Healthy Behaviors	3
KIN 235	Kinesiology	3
HED 337	Exercise Principles and Applications	3
KIN 350	Organization and Administration of Health and Wellness	3
PED 351	Coaching Theory and Techniques	3
HED 425	Evolution of Disease and Illness	3
HED 361	Psychology of Sport and Mental Health	3

BIO 114 & 114L	Human Biology: Introduction to Human Anatomy and Physiology and Human Biology: Introduction to Human Anatomy and Physiology Laboratory	4
BIO 115 & 115L	Musculoskeletal Anatomy and Physiology and Musculoskeletal Anatomy and Physiology Laboratory	4
KIN 494	Capstone in Kinesiology	3
PE or Health Elective		3
PE or Health Elective		3
PE or Health Elective		3
Total Credits		47

MAJOR ELECTIVES

Physical Education Sport Studies majors should consult their advisor for major electives.

ADDITIONAL COURSE CONSIDERATIONS

Physical Education Sport Studies majors should consult their advisor for additional course considerations.

Freshman	
Fall	Spring
SPMT 150	HED 220
BIO 114 & 114L	BIO 115 & 115L
RST 101	PHI 101
FYS 101	ENG 101
	Elective
Sophomore	
Fall	Spring
KIN 235	KIN 350
HED 205	Field 1
Field 7	Electives
Electives	
Junior	
Fall	Spring
HED 337	HED 361
PED 351	Field 3
Field 2	Electives
Senior	
Fall	Spring
HED 425	KIN 494
Field 4	Electives
Electives	

LEARNING GOALS AND OBJECTIVES

Learning Goal 1

Candidates in the Physical Education/Sport Studies program will demonstrate content knowledge, pedagogical, and professional knowledge necessary for successful performance in their field.

Students will:

- Demonstrate knowledge of the basic theories of personality, motivation, perception and social psychology as applied to the field of sport and exercise. This includes making the application of theory into practice in applied settings such as coaching, therapy or management and be prepared to enter careers the allied sports professions
- Design a mental training program from the field of sport psychology that is related to mental health, performance intervention or performance enhancement. Select a sport and a sub-skill within that sport and develop a mental training program(MTP) or psychological skills training program(PSTP) that could be used as a blueprint for a psychological intervention

Learning Goal 2

Candidates in the Physical Education/Sport Studies program will demonstrate professional skills and dispositions necessary for successful performance in their field.

Students will:

- Design an in season or off-season conditioning program for a team or an individual.
- Develop an exercise progression for a team that reduces the risk and maximizes benefit

Learning Goal 3

Candidates in the Physical Education/Sport Studies program will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Students will:

- Be prepared to contribute to the allied sports professions through participation in public relations, education, governmental, research or other professional activities
- Write a reflection paper for inclusion into the coaching portfolio based on the experiences gained in a ten hour community based learning field placement

Learning Goal 4

Candidates will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Students will:

- Reflect on career alternatives outside traditional teaching settings and determine the type of training needed to gain entry into the workforce by writing a reflection paper outlining and clearly expressing and well thought out philosophy of life which will be applied to a career in coaching at either the youth volunteer level, in high school, College or beyond

Learning Goal 5

Candidates will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and the wider community.

Students will:

- Pursue graduate studies or work in coaching science, sports psychology, counseling, sport administration, recreation or leisure.
- Articulate issues on quality of life in a reflection paper based on a visit to an outside agency

Physical Education Sport Studies students who wish to expand their educational opportunities may decide to declare a minor in addition to their major. The decision may be based on career goals or planned graduate studies. Minors generally range from six to eight required courses. A listing of the minors can be found under the Academic Curricula section of the catalog. Some majors and minors can be completed within the minimum 120 credit hour degree requirement. But in some cases additional coursework may be required. Students must complete the appropriate minor request form.

The sports psychology minor provides students interested in psychology and physical education with an interdisciplinary approach to the study of sport, physical activity, health psychology, exercise psychology or coaching. The minor ideally prepares the student for careers in coaching or sport psychology. Students may seek advisement from the Psychology Department or the Department of Kinesiology.

- Sports Psychology Minor (p. 218)
- Coaching Minor (p. 302)

The Coaching Minor is a common minor for many physical education students. The courses in the minor can be attached to any major. Completion of the minor often leads to graduate work at the master's degree level in Coaching Science. The courses can also lead to NY State certification. The minor focuses upon the principles of effective coaching including the role of the coach, practice planning, leadership styles, organization and management, ethics and values clarification, goal setting, communication, career objectives, coaching burn-out and sport psychology. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship. The minor provides students with preparation Kinesiology courses have specific pre-requisites, which are stated in the course descriptions.

Note: Dr. Gregory Reeds serves as the advisor for the coaching minor program in the Department of Kinesiology and serves as the coordinator of the Physical Education Sport Studies program.

SPMT 150 Introduction to Sport Management 3 Credits

Introduces the sport management profession. Primary focus is on the sport industry, including professional sport entertainment, amateur sport entertainment, for-profit sport participation, sport goods and sport services. **Offered:** fall.

HED 205 Wellness and Fitness 3 Credits

Lecture and laboratory. Skills, teaching methods, resource units, evaluative instruments, teaching aids, leading to an overall understanding of the principles of health and wellness. Focus on physical fitness testing, cardiovascular exercise, muscular strength, muscular endurance, flexibility and body composition. There is additional focus on special populations, childhood obesity and the development of a personal fitness program. **Offered:** fall & spring.

HED 220 Healthy Behaviors 3 Credits

Examines health determinants and the effects on all seven dimensions of health. Assessment of personal lifestyle behaviors and factors influencing current and relevant health issues. Emphasis on personal behavior modification to practice health-enhancing behaviors and to reduce health risks. Guidelines for healthy practices related to nutrition, mental health, cancer prevention, HIV/STDs, cardiovascular disease, stress management, sexuality, physical fitness, drugs and alcohol and relationships. Establishes foundation for living healthy and productive lives.

Offered: fall & spring.

HED 337 Exercise Principles and Applications 3 Credits

This course will address the many aspects of fitness and exercise. Students will experience classroom lecture as well as practical experience in the weight room and other alternative exercise facilities. Students will gain experience in the proper design of exercise programs and will understand the importance of periodization as it relates to exercise. Upon successful completion of this course, the student will have a vast knowledge of the principles surrounding strength and conditioning.

Prerequisite: minimum grade of C in BIO 114 & BIO 114L.

Offered: fall & spring.

HED 425 Evolution of Disease and Illness 3 Credits

Overview of humanity's triumphs and failures in the ongoing fight against illness and disease. Explores history of disease, current health issues and trends to determine outlook for emerging health concerns of the future. Examines various models of disease to explain disease agents and route of transmission throughout the body's systems. Analysis of disease occurrence, predisposing factors, body's immune response, symptoms, prevention, treatment and control.

Offered: fall & spring.

HED 361 Psychology of Sport and Mental Health 3 Credits

This course address sport psychology from a sports studies perspective incorporating interdisciplinary knowledge from the social sciences. It is an appropriate approach for many students seeking to understand the psychological processes facing athletes in a competitive environment. Considerable interest surrounds the efforts of sport psychologists to optimize the performance of those characters we call athletes - the sport heroes of our society. Superior athletic performance has long held great intrigue. Tremendous improvements in the identification and measurement of the psychological factors related to athletic performance have resulted in significant improvements in an athlete's ability to produce top level performance on a consistent basis. This course focuses on the application of these psychological principles by athletes, coaches and sport psychology consultants in what has been a quest to produce the ultimate athlete.

Fulfills College Core: Field 5 (Social Sciences)

Offered: fall & spring.

KIN 235 Kinesiology 3 Credits

Scientific study of human movement, emphasizing the basic principles of musculoskeletal anatomy, neuromuscular physiology and biomechanics.

Prerequisite: minimum grade of C in both BIO 115 and BIO 115L.

Offered: fall & spring.

KIN 494 Capstone in Kinesiology 3 Credits

This seminar is a reflective course that is taken for students in the Department of Kinesiology. Students reflect on service excursions, review readings, debate related topics in kinesiology, and compose a final report on a topic in the profession laced with justice, diversity, ethical, and global issues.

Restriction: KIN department majors only.

Fulfills College Core: Core Capstone

Offered: fall & spring.

PED 351 Coaching Theory and Techniques 3 Credits

Coaching is a service activity, which can be experienced as a volunteer, as a paid part-time position or can lead to a full-time profession. The athletes we work with are children and young adults. Many participate at the 'house' league level, while others are involved with more competitive and elite programs. Winning is an important aspect of coaching, however providing a positive athletic experience is essential. Winning may take a secondary role to the development of fundamental skills in many situations. This course focuses upon the principles of effective coaching including the role of the coach, ethics and values clarification. The overriding theme examines the interpersonal strategies leading to a productive coach-athlete relationship.

Offered: fall.

BIO 114 Human Biology: Introduction to Human Anatomy and Physiology 3 Credits

Introductory course for those students requiring an understanding of the structure and function of the human body. Course examines the relationships among physiology, anatomy, metabolism, genetics, evolution, the physical environment, and exercise, and how they relate to diet, human health and disease. Three hours of lecture and one three-hour lab per week.

Fulfills College Core: Field 6 (Natural Sciences)

Offered: fall & spring.

BIO 114L Human Biology: Introduction to Human Anatomy and Physiology Laboratory 1 Credit

One three-hour lab per week.

Corequisite: BIO 114.

Offered: fall & spring.

BIO 115 Musculoskeletal Anatomy and Physiology 3 Credits

Examination of the anatomy, physiology and biomechanical characteristics of the musculoskeletal components, and associated neural and vascular structures, of the human body. Three hours of lecture and one three-hour lab per week.

Prerequisite: minimum grade of C in BIO 114.

Offered: fall & spring.

BIO 115L Musculoskeletal Anatomy and Physiology Laboratory 1 Credit

One three-hour lab per week.

Corequisite: BIO 115.

Offered: fall & spring.

Professional and Technical Studies

Director: Sandra McKenna

INTRODUCTION

The Professional and Technical Studies (PTS) completion degree is designed for graduates with an Associate's degree from accredited community or technical colleges to transfer into Canisius with a total of 60 credit hours. Canisius will also accept applicants who have not completed a two-year degree. The number of transfer credits accepted will be determined on a case-to-case basis. All students will be required to fulfill the minimum of 120 credits needed to earn a bachelor's degree. The completion of the Canisius core curriculum will be required within those credit hours. The Canisius core curriculum is an interdisciplinary study of science, social science, and humanities that best represents the goals and values of a Jesuit education. The balance of the core curriculum will be free elective courses, which a student may use in multiple ways to their advantage. While completing the minimum of 120 credit hours within the core curriculum and free electives, at least 36 credit hours must be completed at the 300 - 400 course level.

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to fulfill requirements for graduation.

ADVISEMENT

All students will have access to full advisement services. Students should work closely with their advisors in discussing career expectations, choosing their electives, and developing their academic program.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum and may be used to complete a minor, to satisfy prerequisites for advanced study, or to design a course of study to achieve their professional goals. The decision may be based on career goals or planned graduate studies. Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required.

Sport Management

Chair: Peter Koehneke

Director: Shawn O'Rourke

INTRODUCTION

If you want to have a rewarding career in sports management, then get in the game at Canisius. The college's undergraduate program in sports administration combines sports marketing, ethics, psychology and law with the business and economics know-how that professional sports agencies crave in young candidates.

You'll learn from experienced and practicing professionals in a city with a rich sports scene. Buffalo is home to two major professional teams: the Buffalo Bills and the Buffalo Sabres. The Buffalo Bisons are the Triple-A affiliate of the New York Mets and the Buffalo Bandits are a championship National Lacrosse League team.

Graduates of the program leave with the education and real-world experience needed to become players in intercollegiate athletics, amateur and professional sports, sports marketing and management, and recreation and non-profit community organizations. More information can be found at the Sports Management website (<https://www.canisius.edu/academics/programs/sport-management>). (<http://www.canisius.edu/sports-mgt>)

QUALIFICATIONS

Students must maintain a 2.0 GPA in their major and a 2.0 overall average to graduate with a degree in Sport Management.

ADVISEMENT

All students should have an advisor in the major and should contact the department directly to have an advisor assigned if they do not already have one. Major advisors are normally assigned in the sophomore year, but may be requested in the freshman year to supplement a student's freshman advisor (their GRIF 101 facilitator). Meetings with academic advisors are required prior to students receiving their PIN for course registration each semester. All majors should work closely with their advisor in discussing career expectations, choosing their major electives, developing their entire academic program and planning their co-curricular or supplemental academic experiences.

DUAL MAJORS

Students who wish to expand their educational opportunities may decide to declare a dual major. The decision may be based on career goals or planned graduate studies. Before a student declares a dual major, it is important to meet with the appropriate academic departments for advisement. Some dual major combinations can be completed within the minimum 120 credit hour degree requirement, but in some cases additional course work may be required. In order to declare a dual major, the student must complete the appropriate dual major request form and get the signature of each department chairperson and the appropriate associate dean.

MINORS

Minors provide students the opportunity to pursue additional interests but generally do not require as many courses as a major. Minors generally range from five to eight required courses. The minors page (<http://catalog.canisius.edu/undergraduate/minors>) provides a complete list of minors and provides links to each minor. Some majors and minors can be completed within the minimum 120 credit hour degree requirement, but in some cases additional coursework may be required. Students must complete the appropriate minor request form.

GENERAL EDUCATION REQUIREMENTS

All undergraduate students must complete either the Canisius Core Curriculum (p. 31) or the All-College Honors Curriculum (p. 42).

FREE ELECTIVES

Free electives are courses in addition to the Core Curriculum or Honors Curriculum and major requirements sufficient to reach the minimum of 120 credit hours required for graduation. Students may graduate with more but not less than 120 credit hours.

MAJOR REQUIREMENTS

Business Foundation Course Requirements

ACC 201	Financial Accounting	3
ACC 202	Managerial Accounting	3
ECO 101	Principles of Macroeconomics	3
ECO 102	Principles of Microeconomics	3
ISB 101	Management Technology	3
MGT 101	Introduction to Management	3
Total Credits		18

Sport Management Course Requirements

SPMT 150	Introduction to Sport Management	3
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SPMT 230	Sport and Recreation Law	3
SPMT 241	Practicum in Sport Management	3
SPMT 245	Technology in Sport	3
SPMT 302	Sport and Ethics	3
SPMT 304	Sport, Culture and Society	3
SPMT 320	Psychology of Sport	3
PED 351	Coaching Theory and Techniques	3
SPMT 355	Sport Operation and Planning	3
SPMT 412	Sport Marketing	3
SPMT 420	Economics and Finance in Sport Industry	3
SPMT 430	Sport Communications	3
SPMT 440	Global Perspective in Sport	3
SPMT 475	Sport Management Professional Development Seminar	3
SPMT 480	Research Methods in Sport	3
SPMT 490	Sport Management Internship	6
Total Credits		51

Arts & Sciences Course Requirements

This degree program also requires 60 hours of Arts & Sciences (non-business & non-education) courses.

RECOMMENDED SEMESTER SCHEDULE FOR MAJOR COURSE REQUIREMENTS

Freshman

Fall	Spring
SPMT 150	SPMT 230

Sophomore

Fall	Spring
SPMT 241	SPMT 245
ECO 101	ECO 102
MGT 101	

Junior

Fall	Spring
SPMT 302	SPMT 320
SPMT 304	PED 351
ISB 101	SPMT 355
ACC 201	ACC 202

Senior

Fall	Spring
SPMT 412	SPMT 420
SPMT 455	SPMT 475
SPMT 430	SPMT 480
SPMT 440	SPMT 490

LEARNING GOALS AND OBJECTIVES

Learning Goal 1 (Knowledge-Observed in Writing)

Candidates in the undergraduate Sport Management programs will demonstrate content and professional knowledge necessary for successful performance in their field.

Students will:

- Demonstrate an understanding of the common principles of sport management; sport leadership; sport operations management; event and venue management; and sport governance.
- Demonstrate an understanding of the principles of finance, and the economics of sport as they fit into national and international economies.

Learning Goal 2 (Knowledge – Observed Skills and Dispositions)

Candidates in the undergraduate Sport Management programs will demonstrate professional skills and dispositions necessary for successful performance in their field.

Students will:

- Demonstrate the ability to communicate with various public and professional audiences through written texts, oral discussions, and multi-media presentations.
- Demonstrate skill in the application of the basic principles of interpersonal and mass communications through interaction with internal and external sport publics.
- Demonstrate essential management and business related skills in the work place.
- Demonstrate skillful operation of technology and assessment related tools that may be applied to various sport management settings.

Learning Goal 3 (Service)

Candidates in the undergraduate Sport Management programs will demonstrate willingness to use their skills to benefit and serve society. Within the contexts of their work, candidates promote authentic learning, social and emotional development, and a commitment to social justice in environments that foster respect for diversity and the dignity of all.

Students will:

- Demonstrate understanding of the critical social, psychological, and philosophical base issues of the sport environment.
- Demonstrate understanding of moral and ethical implications of sport policy and strategies.

Learning Goal 4 (Professionalism)

Candidates in the undergraduate Sport Management program will demonstrate self-reflection as a habit of mind, continuously assessing and refining their professional practice as they construct a rich repertoire of research-based knowledge, skills, and attitudes for effective performance ensuring that all students and/or clients have optimal opportunities to learn and grow.

Students will:

- Learn to ask challenging, probing questions and seek thorough, well-rounded answers.
- Act with integrity and fairness to ensure a professional system of accountability for every student’s academic and social success and will model principles of self-awareness, reflective practice, transparency, and ethical behavior.

Learning Goal 5 (Leadership)

Candidates in the undergraduate Sport Management programs will become adept at applying their acquired knowledge in the process of evaluating their own professional performance and decision-making with respect to its impact on students and/or clients, organizations, and wider community.

Students will:

- Demonstrate the ability to assume leadership roles in various professional settings and work effectively with diverse groups and organizations seeking to improve the performance of those they lead.
- Understand and can anticipate and assess emerging trends and initiatives in the sport environment.
- Coaching Minor (p. 302)

SPMT 150 Introduction to Sport Management 3 Credits
Introduces the sport management profession. Primary focus is on the sport industry, including professional sport entertainment, amateur sport entertainment, for-profit sport participation, sport goods and sport services.
Offered: fall.

SPMT 230 Sport and Recreation Law 3 Credits
The class will focus on the general principles of law as they apply to the today's world of sport. Class discussions will be geared toward practical application and real life examples.
Offered: spring.

SPMT 241 Practicum in Sport Management 3 Credits
A directed practicum experience in sport industry setting. Opportunities provide for students to develop knowledge, values and beginning practice skills appropriate for entry-level positions.
Offered: fall.

SPMT 245 Technology in Sport 3 Credits
This course is an introduction to technology in sport. The course is designed to provide students with experience in integrating technology into sport.
Offered: spring.

SPMT 302 Sport and Ethics 3 Credits
Will assist you in establishing a fundamental philosophy for sport in your life (both personal as well as professional). Questions that will be addressed in class are why you are/ want to be involved in sports in a professional capacity; what values drive your actions/decisions.
Fulfills College Core: Ethics
Offered: fall.

SPMT 304 Sport, Culture and Society 3 Credits
This course will focus upon important, enduring issues within the sociology of sport in addition to a few controversial issues currently under debate.
Offered: fall.

SPMT 320 Psychology of Sport 3 Credits
This course will review the major social/psychological theories utilized in current sport psychology research.
Fulfills College Core: Field 5 (Social Sciences)
Offered: spring.

SPMT 355 Sport Operation and Planning 3 Credits
This course is designed to provide learning experiences in the administrative tasks of planning new athletic facilities, renovating older facilities and maintaining existing sport facilities. Management principles and concepts as they affect facilities will also be examined.
Offered: spring.

SPMT 361 Guest Service Professional 3 Credits
This course provides guidelines and best practices for providing excellent customer service that will enable frontline associates and service staff in back-up and support roles to build, maintain, and increase a loyal customer base in professional sport.

SPMT 412 Sport Marketing 3 Credits
This course investigates principles and processes in sport marketing and sales. Focuses on research and development, sport promotion, sport sponsorship, advertising, merchandising, and distribution of sporting goods.
Offered: fall.

SPMT 420 Economics and Finance in Sport Industry 3 Credits
This course is a survey examination of principles of economics, budgeting, and finance as it applies to the sport industry.
Offered: spring.

SPMT 430 Sport Communications 3 Credits
This course provides a senior-level exploration of the role of sport communication in contemporary cultures.
Fulfills College Core: Oral Communication
Offered: fall.

SPMT 440 Global Perspective in Sport 3 Credits
Is an interdisciplinary examination of sport as a global phenomenon. Historical, cultural, economic, and governance perspectives are considered. Examine the global sporting experience from the 19th century to the present.
Fulfills College Core: Global Awareness
Offered: fall.

SPMT 455 Governance and Policy in Sport Organizations 3 Credits
This course is an examination of sport organizations focused on both professional and amateur governance structures and processes. The study of policy in educational, non-profit, professional and international sport venues will also be addressed.
Offered: fall.

SPMT 475 Sport Management Professional Development Seminar 3 Credits
To prepare the student for the process of seeking a job as well as being successful in a job in the sports management field. This is a seminar format in which students synthesize and apply theories, concepts, and practices in the leadership and management of sport organizations.
Offered: spring.

SPMT 480 Research Methods in Sport 3 Credits
Covers the development of empirical research designs for both practical and theoretical problems in sport management. Includes literature review of hypothesized relationships, and formulation of research proposals.
Fulfills College Core: Advanced Writing-Intensive
Offered: spring.

SPMT 490 Sport Management Internship 3-6 Credits
This supervised professional experience provides a continuous and structured opportunity to apply principles and skills developed in the classroom to the solution of practical problems in a sport industry setting.
Offered: spring.

ACC 201 Financial Accounting 3 Credits
For Non-Accounting Majors. Introduction to accounting concepts for external financial reporting. Accounting theories and principles relative to asset and liability valuations, and income determination.
Offered: fall & spring.

ACC 202 Managerial Accounting 3 Credits
For Non-Accounting Majors. Introduction to accounting concepts for internal reporting and control. Cash budgeting, decision making, breakeven analysis, and performance evaluation.
Prerequisite: ACC 201.
Offered: fall & spring.

ECO 101 Principles of Macroeconomics 3 Credits

Explanation of market system through supply and demand analysis.

Measurement of macroeconomic variables and development of economic models to analyze problems of unemployment, inflation and economic growth. Various fiscal and monetary policies will be discussed.

Fulfills College Core: Field 5 (Social Sciences)

ECO 102 Principles of Microeconomics 3 Credits

Explanation of how the market system operates in the context of limited resources. Emphasis on the manner in which consumers and firms determine what to produce, how to produce and for whom to produce.

Fulfills College Core: Field 5 (Social Sciences)

ISB 101 Management Technology 3 Credits

Introduction to information systems, hardware and software; information systems concepts in business; telecommunications; Ecommerce; enterprise systems; ethics, crime and security. Hands-on development of business applications.

Offered: every fall & spring.

MGT 101 Introduction to Management 3 Credits

Overview of the managerial functions and processes, including planning, organizing, leading and controlling, addressed from behavioral, economic, historical, and other perspectives.

Offered: fall & spring.

STUDENT AFFAIRS

Participation at all levels of the college's operation is an important part of the student experience at Canisius. Student involvement is a valuable part of each individual's learning process and to the college as a whole, enabling the institution to draw upon the creativity, innovation and leadership of its students in its efforts to serve them better.

Students discover that education takes place both inside and outside of the classroom. In keeping with the Jesuit ideal of educating the whole person, students learn and develop a complete sense of self through participation in such experiences as life in the residence halls, co-curricular activities, organizational membership and leadership, social involvement in the community and membership on the various college committees. Through such involvement in the entire life of the college community, a student's years at Canisius will be a time of intellectual growth, advancement in self-knowledge and an improved knowledge of others. Additional information about many of these programs is available at the Student Experience website (<https://www.canisius.edu/student-experience>).

The vice president for student affairs determines all student affairs policies and procedures for the college, subject to the approval of the president.

Assistance to students is provided by the following offices within the division of student affairs:

- ALANA (African American, Latino/a, Native American, Asian American) Student Center (p. 328)
- Athletics – Division I Intercollegiate (p. 328)
- Campus Ministry (p.)
- Campus Programming (p.)
- Club and Intramural Sports (p.)
- Counseling Center (p.)
- The Griff Center for Academic Engagement (p.)
- International Student Programs (p.)
- Office of Event Services (p.)
- Public Safety (p.)
- Residence Life (p.)
- Student Health Center (p.)
- Study Abroad Programs (p.)

ALANA STUDENT CENTER

(ALANA = African American, Latino/a American, Asian American, Native American students) A genuine, pluralistic campus fosters respect, equality and understanding of a mosaic of cultural heritages. Such a campus recognizes the interdependence of cross-cultural student communities and the integrity of each individual. The college aims for all individuals to feel a sense of inclusion in the college's mission and activities, particularly those who have been historically marginalized in America primarily due to the color of their skin.

The ALANA Student Center (<https://www.canisius.edu/student-experience/student-support-services/alana-student-center>) assists the college in providing services for ALANA students while educating the entire student population about ALANA cultural patterns and trends in higher education. The staff assists students concerning racial perspectives, self-concept issues and participatory involvement within the framework of the campus.

Although primarily co-curricular focused, the ALANA Student Center also serves students as a referral and support unit with respect to other

collegiate matters. The Center provides a place for students to share and discuss cross-cultural experiences and to interpret those experiences. By way of this service, and other support services campus-wide, Canisius College provides students with tools essential for their success in school and in the greater community.

ATHLETICS

Canisius College conducts an extensive NCAA Division I athletics program for both men and women and is a member of the MAAC Conference.

Men's Sports

- Baseball
- Basketball
- Cross-country/indoor/outdoor track
- Golf
- Ice hockey
- Lacrosse
- Soccer
- Swimming and diving

Women's Sports

- Basketball
- Cross-country/indoor/outdoor track
- Lacrosse
- Rowing
- Soccer
- Softball
- Swimming and diving
- Volleyball

CAMPUS MINISTRY

Campus Ministry (<https://www.canisius.edu/faith-and-service/campus-ministry>) supports the spiritual and religious life of the campus with activities open to students and staff of all faiths. Campus Ministry seeks to empower students, faculty, administrators, staff and alumni as persons of faith "for and with others" in the Catholic, Jesuit tradition.

In addition to providing for a vital Roman Catholic liturgical and sacramental life, the campus ministry team:

- offers opportunities for spiritual retreats
- organizes opportunities for prayer and small faith communities
- promotes opportunities for service to those in need, both locally and through domestic and international service immersion trips
- promotes ethical values and educates and organizes around issues of social justice and peace
- provides pastoral counseling and spiritual direction

CAMPUS PROGRAMMING

Campus Programming encourages and promotes involvement and enhances student learning through co-curricular programming opportunities. To help achieve this mission, Campus Programming allows students the opportunity to get involved on campus. Students may choose from a variety of clubs and organizations, including the Undergraduate Student Association (USA) which is comprised of the entire student body and is represented by an elected group, the Student Senate. The purpose of the Senate is to assist, finance and integrate all student organizations and to represent the

views of the student body to the college administration. The Commuter Student Association (CSA) represents all of the commuter students, and the Residence Hall Association (RHA) is the student governing body for the resident students at Canisius. Additionally, there are over 90 student clubs and organizations at Canisius. These organizations provide students with an opportunity to explore an academic subject informally yet deeply, gain familiarity with the arts or with differing cultures, provide service to the college or to the community, develop a wide range of leadership skills, or simply socialize with other students. Various honor societies give recognition to student excellence in numerous areas, and the student-run media on campus, such as the college newspaper (The Griffin) and the campus radio station (WCCG), provide students with opportunities to explore communications media while keeping the college community informed and entertained.

CLUB SPORTS AND INTRAMURALS

The currently active club sports are listed below. Additional club sports can be added based on student interest. Club sports are played at a more competitive level than intramurals and often involve team travel. Students are responsible for additional fees associated with most club sports.

Co-ed club sports

- Bowling
- Cheerleading
- Endurance
- Field hockey
- IHSA (Equestrian)
- Mixed Martial Arts
- Rifle
- Tennis
- Track and Field
- Ultimate Frisbee

Men's club sports

- Men's Rugby
- Men's Soccer
- Men's Volleyball
- Men's Ice Hockey

Women's club sports

- Dance Griffs
- Women's Soccer
- Women's Volleyball

Intramurals

All intramural sports are currently co-ed and provide an opportunity for students to engage recreationally for fun, health, and wellness. Current intramural sports:

- Basketball-open
- Basketball-pickup
- Volleyball
- Floor Hockey
- Indoor Soccer
- Outdoor Soccer
- Flag Football
- Handball

- Dodgeball
- Whiffle ball

COUNSELING CENTER

The Counseling Center (<https://www.canisius.edu/student-experience/student-support-services/counseling-center>) is committed to developing the personal and academic potential of Canisius College students by providing comprehensive counseling services and outreach education to support the emotional and mental health of our students. Professional counseling services are available to all registered students, at no additional cost, to address concerns that may interfere with a student's academic success and personal growth. In addition to individual and group counseling, counselors are available during and after college business hours for crisis intervention and mental health emergencies. Counselors are also available for consultation and referrals to community resources.

Students who access counseling services are assured confidentiality, unless it is apparent that a student may do harm to others. A student's privacy and confidentiality are carefully guarded and protected. No information about participation in counseling becomes part of any official record. Students may schedule appointments by calling the Counseling Center at 716-888-2620. Appointments may also be scheduled in person. The Counseling Center is located in Bosch Hall Room 105, directly off the lobby of Bosch Hall. Enter via the quad side entrance of Bosch. The Counseling Center offers many educational programs and workshops throughout the academic year for the Canisius College community. Refer to the Counseling Center website for the most current information on programs and services, including online screening programs and self-help information.

THE GRIFF CENTER FOR ACADEMIC ENGAGEMENT

The Griff Center (<https://www.canisius.edu/student-experience/student-support-services/griff-center>) represents a collaboration between the Office of Academic Affairs and the Office of Student Affairs. A complete description of the Griff Center and the programs and experiences it provides are available in the Griff Center section of the catalog (p. 70), which is published in the academics section of catalog.

INTERNATIONAL STUDENT PROGRAMS

Canisius College welcomes international students and appreciates the cultural diversity they bring to our student body. Currently our international students are from approximately 30 countries including areas as diverse as Europe, the Middle East, Africa, Asia, South America and Australia. The Office of International Student Programs advises international students and assists them with their adjustment to Canisius College and American culture by organizing educational and social programs. To further encourage cultural understanding within the Canisius community, the International Student Programs Office also arranges community families and peer mentors for our international students. Other services for international students include an extensive orientation for new students, assistance understanding immigration regulations and workshops on practical training benefits. Global Horizons, a student organization for American and international students, plans additional activities to promote cultural awareness on campus. An example of this is Global Fest, an annual event celebrating different cultures through food tasting, music, performances and crafts from around the world! International students are required to complete an online semester SEVIS registration form at the start of each semester. This form ensures that ISP properly registers them for the semester in the SEVIS (Student

Exchange and Visitor Information System). All international students studying on an F-1 or J-1 visa are required by the college to purchase a health insurance plan offered by Canisius College. This plan is designed and written specifically for the health care needs of international students studying in the United States. Information about the required health insurance plan is available in the Office of International Student Programs.

OFFICE OF EVENT SERVICES

Members of the Canisius Community or the public looking to reserve non-classroom space (including athletic facilities) for meetings and events should contact the Office of Event Services. Office staff will assist with room selection, securing appropriate technology, and facilitating connections with Chartwells food service when requested.

PUBLIC SAFETY

The Department of Public Safety, located in the basement of the Bosch Residence Hall, is open 24 hours a day, providing around the clock protection and services to the campus community. The department was established to protect the educational environment of Canisius College, keeping the environment free from the threat of physical harm, property damage and disruptive activity. Departmental objectives include aiding in the enforcement of federal, state and local laws; preventing crime; regulating non-criminal conduct and preserving the peace. Uniformed Public Safety Officers, all of whom are sworn peace officers, are on duty 24 hours a day, seven days a week, 365 days a year. Their primary responsibilities include patrolling the campus area on foot, on bicycles and in vehicles; security services; emergency response; and requests for assistance involving members of the campus community.

Public Safety also provides a variety of support services that are tailored to meet the needs of the campus community. These services include conducting crime prevention and personal safety programs, dispatching the campus shuttle system, providing Canisius ID cards, and providing assistance to campus motorists experiencing minor mechanical problems.

For a comprehensive summary of the activities and services provided by Public Safety, visit the Department of Public Safety website (<https://www.canisius.edu/student-experience/student-support-services/public-safety>).

Crime Statistics

Canisius College complies with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act by providing available information on campus security and personal safety. This information includes crime prevention, public safety, law-enforcement authority, crime reporting policies, disciplinary procedures and other important matters regarding campus security. Statistics are available from the three previous calendar years on reported crimes that occurred on campus, in certain off-campus buildings or property owned or controlled by Canisius College, and on public property within or immediately adjacent to and accessible from the campus. Upon request, the Canisius College Advisory Committee on Campus Safety will provide all campus crime statistics as reported to the United States Department of Education. This information is available on the Public Safety website (<https://www.canisius.edu/student-experience/student-support-services/public-safety>) website (<http://www.canisius.edu/campus-life/public-safety/policy-laws-stats>). A printed copy may be obtained by calling the office of student affairs at 716-888-2130.

RESIDENCE LIFE

Residence Life promotes the personal growth of resident students as they adjust to college life and interact with others in the residence halls and the college community.

Canisius College believes that the experience of living on-campus contributes to the development of a well-rounded individual. Residence Life creates an environment where students can live, learn and develop leadership skills, and become men and women for and with others.

There are several housing options available to resident students. Bosch and Frisch halls are traditional residence halls for freshman students. They include double rooms, suites and social lounges with kitchens and lounges on each floor. Dugan Hall, our newest traditional residence hall for sophomore students includes double rooms, suites and social lounges with kitchens on alternate floors. The George M. Martin Honors Hall offers students in the College Honors Program a unique opportunity to live in an educational learning environment. This residence hall features single and double rooms with community bathrooms, kitchen and two social lounges. This hall's environment stresses academic excellence, social interaction, and fosters community values and trust among its residents. The Delavan Townhouses, built in 2002, feature one-, two-, three-, four-, and five-person apartments with single-person bedrooms. These apartments also have living rooms, kitchens, bathrooms and air conditioning. The Village Townhouses feature four- and five-person apartments. These apartments are equipped with some single and double bedrooms, kitchens bathrooms, and air conditioning. Additional information including virtual tours, pictures, floor plans, cost and the application process can be found on the Student Life webpages (<https://www.canisius.edu/student-experience/student-life-and-housing>).

STUDENT HEALTH CENTER

The Student Health Center (<https://www.canisius.edu/student-experience/student-support-services/student-health>) is committed to providing students high-quality health care that is easy to access, individualized and effective. Our staff views each visit as an opportunity to provide needed medical and nursing care and to educate students to become informed partners in medical decisions. Providers assist students in identifying behaviors, perceptions and habits that are beneficial for current and future health.

The Center is staffed by physicians, a nurse practitioner, and registered nurses. Appointments are recommended and can be made 24/7 using My Canisius Health, the student online scheduler. Students can also "walk in" to schedule an appointment. Students who are sick or injured may be treated at MASH Urgent Care when the Student Health Center is closed. Through a unique agreement, MASH Urgent Care will provide free round trip van service to a MASH Urgent Care Center 7 days a week. MASH vans pick up and return students to any of the college's regular shuttle stops. Although the ride is free, care provided is billed to student's health insurance plan. It is important to bring your health insurance card and photo identification to your MASH visit.

MASH Urgent Care Center
3980 Sheridan Drive
Amherst, New York 14226
Phone: 716-929-2800

Medical emergencies on campus are handled by Public Safety. Officers are trained in first aid and CPR and respond to the scene of on-campus medical emergencies.

Student Health also offers an on-call nurse service 24/7 by calling 1-800-850-4556. Visit the Student Health Services (<https://www.canisius.edu/student-experience/support-start/student-health/services>) webpage for more detailed information about the center.

Health and Accident Insurance

Canisius College strongly recommends that all students have health insurance.

- Students should carry their health insurance card with them and know how their plan coverage works when they are at college.
- Canisius offers students registered for 6 or more credits a sickness and accident plan designed for the healthy college student. Enrollment periods occur in September and January.
- All full-time undergraduates have accident and accidental death coverage through the college. This coverage is limited.
- Details about the sickness and accident plan are available on the Student Health Center website.

Immunization Requirements for Class Attendance Measles, Mumps, Rubella

New York State law requires all students taking six or more credits, attending any classes on campus, and born on or after January 1, 1957 to provide proof of immunity against measles, mumps and rubella to the Student Health Center prior to class attendance. Students must submit proof of two doses of measles (rubeola) vaccine, one dose of rubella (German measles) vaccine and one dose of mumps vaccine, given on or after their first birthday and after 1967.

Meningitis Requirement

All students registered for 6 or more credits and attending class on campus, regardless of birth date, are required to receive information about the risk of meningococcal disease and the benefit of vaccination. Students are required to read the information and either obtain the meningitis vaccine or sign a vaccine refusal statement within thirty days of first class attendance.

Submission Dates and Non-Compliance

Health requirements, including immunization records, must be submitted before the first day of class. Non-compliance with these health requirements results in registration cancellation, removal from college housing, and inability to register with the college for future semesters. If registration is cancelled, a student may be re-registered once the health forms are submitted and deemed complete. Canisius may charge a fee for re-registration. Compliance with these health requirements is strictly enforced across the campus.

Students who are only taking online courses are generally exempted from these requirements, although some online programs have established stricter immunization requirements prior to matriculation or course enrollment and these requirements are detailed in the program descriptions in the catalog.

The Student Health Center website (<https://www.canisius.edu/student-experience/support-start/student-health/health-requirements>) has detailed information about health requirements and links to the required forms.

STUDY ABROAD PROGRAMS

Canisius College students who study abroad say it is a life-changing experience which significantly expands their personal and professional horizons. The college offers diverse study abroad opportunities in 13 countries and 22 cities. While several Canisius majors require an

international experience, students of all majors should consider study abroad.

Students who study abroad:

- Get jobs. They acquire marketable skills which are sought by potential employers in this global economy. According to an article in the Huffington Post, four out of five business leaders say that if similar candidates were before them and one had study abroad experience and one didn't, they'd almost always hire the one with study abroad experience.
- Become more fluent in a foreign language when they immerse themselves in the culture and live among native speakers (however, some locations have no language requirement).
- Develop valuable life skills such as independence, flexibility, cross-cultural awareness/communication and problem-solving.
- Enhance their knowledge of global relations and deepen their knowledge of cultural and societal differences.
- Travel and meet new people and gain confidence.

Additional information about Study Abroad and other international experiences is available at the Global Opportunities website (<https://www.canisius.edu/global-education>).

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