



# ST. LAWRENCE UNIVERSITY

## 2023-2024 Course Catalog

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# The Curriculum

## Degrees Offered

St. Lawrence offers undergraduate Bachelor of Arts and Bachelor of Science degrees. The degree of Bachelor of Arts is given on the satisfactory completion of programs of study with concentration in the fields of African Studies (combined majors), Anthropology, Art and Art History, Asian Studies (combined majors), Business in the Liberal Arts (offered as a second major only), Canadian Studies (combined majors), Digital Media & Film, Economics, English (combined majors), Environmental Studies (combined majors), Estudios Hispánicos, Finance, Francophone Studies, Global Studies, Government, History (combined majors), International Economics-Language (combined majors), Multi-Language, Music, Performance and Communication Arts, Philosophy, Public Health, Religious Studies and Sociology, or a Multi-Field program with concentration in two or more of these fields.

The degree of Bachelor of Science is given on the satisfactory completion of programs of study with concentration in the fields of Biochemistry, Biology, Biology–Physics, Biomedical Sciences, Chemistry, Computer Science, Conservation Biology, Data Science, Economics–Mathematics, Environmental Studies (combined majors), Geology, Geology–Physics, Mathematics, Neuroscience, Physics, Pre-health Chemistry, Psychology, Statistics, or a Multi-Field program with concentration in two or more of these fields.

Either the Bachelor of Arts or Bachelor of Science degree may be elected upon satisfactory completion of a double major if one of the majors is appropriate to the degree. A multi-field major may elect either the degree of Bachelor of Arts or Bachelor of Science when the major consists of two fields and each is appropriate to a different degree.

## The St. Lawrence Curriculum

A St. Lawrence education prepares students to think critically and creatively, to examine and express their ideas and values, to understand those whose beliefs and circumstances may be different from their own, and to pursue an understanding of the natural world and human experience. A St. Lawrence education encourages and develops within students the virtues important for lifelong learning, such as inquisitiveness, perceptiveness, intellectual honesty and humility, fair consideration of evidence, respectful treatment of those with whom one is in dialog, and a commitment to the free exchange of ideas. These virtues promote within students a personal ethic of considered values and the capacity to fully realize their abilities as people and local, national, and global citizens. As part of a St. Lawrence education, all students should develop knowledge of the importance of cultural, natural, political, and socio-economic systems in shaping one another.

To realize this vision, a St. Lawrence education is designed to develop:

1. an ability to speak and write clearly, articulately, and persuasively;
2. an ability to acquire, evaluate, and communicate information;
3. an ability to analyze and resolve complex problems, both independently and collaboratively;
4. an ability to reason quantitatively, logically, and/or symbolically;
5. an ability to integrate knowledge from multiple perspectives;
6. an ability to critique and/or create artistic works;
7. a knowledge of the complexity and diversity of the human experience;

8. a knowledge of the complexity and diversity of the natural world;
9. a depth of understanding in at least one field; and
10. a capacity to examine critically the relationship between humans and technologies.

## Graduation Requirements

All students must complete thirty-three and a half semester course units (33.5), including all requirements specified for their chosen major(s), and a curriculum of general education requirements specific to their year of matriculation. Also required are a 2.0 cumulative grade point average (GPA) overall and in at least one major, based on St. Lawrence University courses only. A 2.0 GPA is also required in any other declared majors or minors. These requirements are ordinarily earned in four academic years. The normal course load is four units per semester except for an additional half unit as required by the First-Year Program during the two semesters of the first year. In addition, students should be aware that they may need to take an additional half unit in one semester to reach the required 33.5 units. It is the student's responsibility to ensure they satisfy the 33.5 semester course units required. Each full unit is equivalent to 3.6 semester hours.

All students declare a major by the end of the sophomore year. In addition to the major, students must successfully complete a curriculum of the First-Year Program requirement, general education requirements, and the writing proficiency requirement as detailed below.

Students are required to complete at least one unit from each of the following perspectives:

### The Arts, Social Sciences, Humanities, and Natural Sciences

Courses fulfilling this requirement need to be from different departments and only one course may be from the student's major. FYS courses can be used to fulfill this requirement; FYP courses cannot. The instructor of record designates the perspective of their course using the guideline that at least 75 percent of the course's content achieves the learning goals for The Arts, Social Sciences, Humanities, or Natural Sciences, as described below (Not all courses have to fulfill this requirement and be designated as ARTS, SS, HU, or NS-L):

1. **The Arts (ARTS):** Courses have primary learning goals in which students develop:
  - a. an enhanced awareness of the process of artistic production through making works of art; and/or
  - b. an understanding of the diverse ways to interpret and analyze works of art.
2. **Social Sciences (SS):** Courses have primary learning goals in which students develop:
  - a. an enhanced awareness of the diverse ways in which economic, political, and social institutions can be organized; and/or
  - b. an understanding of the various ways in which evidence about social structures and interactions is acquired and handled; and/or
  - c. an understanding of how social science knowledge is gained through the formulation, testing, and reformulation of theories and hypotheses.
3. **Humanities (HU):** Courses have primary learning goals in which students develop:
  - a. an enhanced awareness of the variety of ways humans understand, signify, and make meaning of their lives; and/or
  - b. an enhanced awareness of how cultures and the interpretations of cultures change over time.
4. **Natural Science with Lab (NS-L):** Courses have primary learning goals in which students develop:

- a. an understanding of the physical, chemical, biological, and/or behavioral phenomena of the natural world and, insofar as possible, an ability to relate them to everyday experience; and
- b. a theoretical and quantitative understanding of the processes underlying the physical, chemical, biological, and/or behavioral phenomena of the natural world; and
- c. an understanding of how scientific knowledge of the natural world is obtained and revised through hypothesis testing using experimental and/or observational methodologies.

In addition, Natural Science with Lab Courses are required to include a regularly scheduled laboratory component that meets weekly for at least 90 minutes, in which students have the opportunity to examine phenomena of the natural world using experimental and/or observational methods.

## **Human Diversity: Culture and Communication**

Students are required to complete one of the following combinations in human diversity and communication:

- a) One course approved for diversity credit (DIV13) and one course in a foreign language (LANG).
- b) Two courses approved for diversity credit (DIV13).
- c) One course approved for diversity credit (DIV13) and an experience on an off-campus program approved for diversity credit by the CIIS Committee.

The Academic Affairs committee will approve courses for DIV13 credit. Courses that fulfill the DIV13 requirement may also fulfill other general education requirements. FYS courses may be approved for DIV13 or LANG credit; FYP courses cannot. DIV13 courses are at least one unit and include primary learning goals in which students develop:

- a) an understanding of the nature and significance of diversity within and among groups; and
- b) an understanding of the dynamics of power and justice within and/or among groups or societies; and
- c) a capacity for critical self-reflection on social location, including how social location shapes human interactions.

The Academic Affairs committee will approve courses for LANG credit. Courses that fulfill the LANG requirement may also fulfill other general education requirements. LANG courses are at least one unit and include primary learning goals in which students:

- a) learn the skills necessary for communication in another language: reading, listening, writing and speaking; and
- b) are introduced to the different cultures in which these languages are employed; and
- c) are exposed to global diversity and encouraged to develop a critical perspective on their own cultural practices.

## **Quantitative/Logical Reasoning (QLR)**

Students are required to complete at least one unit that meets the learning goals of either quantitative reasoning or logical reasoning. Courses that fulfill the QLR requirement may also fulfill other general education requirements. FYS courses may be approved for QLR credit; FYP courses cannot.

The Academic Affairs Committee will approve courses for QLR credit using the following guidelines:

1. **Quantitative Reasoning Courses** have primary learning goals in which students, through multiple opportunities and classroom instruction, develop their abilities to:
  - a. address questions by examining quantitative evidence using appropriate methods of analysis and evaluation; and
  - b. explain their conclusions and the quantitative methods they used in developing their reasoning.
2. **Logical Reasoning Courses** have as the primary learning goals that students develop:
  - a. an understanding of deductive and/or inductive logic; and
  - b. an understanding of the methods of determining the reliability of these types of reasoning.

## Environmental Literacy (EL)

Students are required to complete at least one unit that meets the learning goals of environmental literacy courses. Courses that fulfill the EL requirement may also fulfill other general education requirements. FYS courses may be approved for EL credit; FYP courses cannot.

The Academic Affairs Committee will approve courses for EL credit. EL courses are at least one unit and at least 50 percent of the course's content must achieve the learning goals for Environmental Literacy, as described below:

1. Environmental Literacy Courses have primary learning goals in which students, through multiple opportunities and classroom instruction, develop:
  - a. a recognition of the consequences of human activities on natural systems; and/or
  - b. an awareness of the cultural, economic, and political forces that affect environmental policies; and/or
  - c. an understanding of natural systems and/or the impacts they can have on the environment, human life, health, and welfare.

## First-Year Program (FYP) / First-Year Seminar (FYS)

In addition to three other courses drawn from the general curriculum as described in the following pages, students in their first semester enroll in a combined academic and residential program that emphasizes critical thinking and active student participation in both the classroom and the residence, called the First-Year Program (FYP). The FYP consists of four parts:

An interdisciplinary, often team-taught course focused on both contemporary issues and enduring questions.

An emphasis on communications skills, in particular writing, speaking, attentive reading and research and information literacy.

An advising system that ensures systematic and supportive involvement of FYP faculty, Orientation Leaders, Career Services staff, Residential Coordinators, Community Assistants, Athletic staff and Academic Advising staff.

A residential college system wherein each first-year residence houses students enrolled in the same section of the FYP course, with the goal of developing integrated living and learning communities. All residential colleges are on the St. Lawrence campus, with the exception of London, England, first introduced in the fall of 2012, which has some different parameters from the on-campus units.

The FYP and FYS function as an introductory writing and speaking course in the fall and a standard research-oriented first-year seminar in the spring.

In the summer before matriculation, students review descriptions of the FYP courses for that fall and indicate those they find most interesting; they are enrolled in one of the several sections of the FYP course (FRPG 10XX) based on those interests. Each section corresponds to a residential college, and FYP faculty also serve as students' academic advisor. Each FYP course explores a distinct set of themes or issues, but all focus on the breadth of the liberal arts and encourage student participation, collaborative intellectual experiences, self-expression and critical thinking. The fall semester course follows an elaborate writing skills sequence that stresses writing as a process, short essays, and revision, as well as an introduction to the integration of research into the writing process. The fall course also involves formal instruction in oral communication.

The FYP faculty also work with Student Life staff to plan co-curricular programs related to the course themes and to encourage students to take advantage of the full schedule of University social and intellectual activities. The residents, the residential staff and the faculty work together to design programs and encourage maximum student involvement in the life of the residential college.

In addition to encouraging students to participate in their own colleges, the First-Year Council, composed of two elected student representatives from each of the colleges, provides an opportunity for students to develop leadership skills, participate in University governance, address issues of concern to first-year students and plan social events for the entire first-year class.

In the second semester of the first year, students continue to develop their research, writing and oral communication skills in one of approximately 40 research-oriented First-Year Seminars (FYS). Students will register for their FYS course during the same week they register for their other spring courses. In the spring course, the writing and speaking process is extended by a more direct emphasis on research skills and more explicit instruction in research, as well as continuing to develop the writing and speaking skills from the fall.

In the spring, Student Life staff and faculty continue to work with the residential communities to facilitate both the continued development of these communities and the transition to upper-class residential life. The First-Year Council also continues to plan events for all first-year students.

Because of the importance of the FYP and FYS in preparing students for success at St. Lawrence and beyond, withdrawal from those courses is not permitted, nor may FYP and FYS courses be taken on a Pass/Fail basis.

Students who fail the FYP in the fall must complete alternative coursework to be determined on a case-by-case basis by the associate dean of the first year and the associate dean for academic advising programs in consultation with the director of the Munn Center for Rhetoric and Communication (WORD Studio). Students who fail the FYS must retake the FYS in their sophomore year.

FYP courses do not count for department or program credit; they cannot be used to fulfill other general education requirements. FYS courses may count for department or program credit and may be used to fulfill other general education requirements.

## **Writing Proficiency Requirement**

To be eligible for graduation, all St. Lawrence students must demonstrate throughout their college careers the ability to write prose that their professors judge to be proficient.

1. Each semester when reporting grades, faculty members will submit a WP (Writing Proficiency) notation and a writing sample to the associate dean of academic advising for students who have not shown satisfactory writing skills. Students who receive one WP notation will receive an email from the Academic Advising office outlining writing support programs.
2. Students who receive a second WP notation must either:
  - a. pass ND 207, a .5-unit College Writing Workshop course within the next two semesters, or
  - b. satisfactorily fulfill a plan for writing improvement as specified by the director of the WORD Studio. The student's advisor also will be notified of the two WP notations and of the plan for improvement. Any student who does not develop and begin working on a plan for writing improvement in the semester following receipt of the second WP notation will receive an advising hold and be unable to register. That student must meet with the associate dean of academic advising to agree on a plan for writing improvement to be carried out in the upcoming semester. Any student who fails to fulfill a plan for writing improvement in the second semester after receipt of a second WP notation will be suspended.
3. Any student who earns three or more WPs must take and pass the .5-unit College Writing Workshop course. If the student has already taken this course, they must create and execute a new plan for writing improvement with the director of the WORD Studio.
4. The notations of WP are monitored by the registrar and the associate dean of academic advising and do not appear on a student's official transcript.
5. Two or more unresolved WPs will prevent a student from graduating.

## Residence Requirement

Along with the requirement that two years (16 units) must be taken in residence at St. Lawrence, it is a basic expectation that at least one semester of the final year before graduation will be taken in residence at St. Lawrence. Students who need to complete the St. Lawrence degree during the final year by taking approved transfer courses elsewhere must work with the Registrar's Office and the Office of Academic Advising (and CIIS in circumstances involving off-campus study programs) to ensure the completion plan is viable and falls within the allowed limits for transfer credit.

## Fee/Commencement Requirement

No students will graduate if they have not discharged all financial obligations to the University.

## Major Requirements

All students are expected to complete a concentrated field of study referred to as the major, which requires no fewer than eight semester unit courses. Courses counting toward the student's major completion cannot be taken on a pass/fail basis after the major has been declared. Students' programs in the junior and senior years are arranged in consultation with their academic advisor(s) and the chair(s) of their major department(s)/program(s). Change of the major may be made only with the consent of the chair and the student's advisor for the new major.

## Admission to a Major

1. Students must declare a major in the second semester of their sophomore year or file with the associate dean for academic advising a petition to postpone major declaration. Transfer students entering at the junior level should review major requirements at the time of application and must declare the major no later than the beginning of the second term of attendance. Students who do not declare the major in the expected timeframe will be placed on a registration hold until they do.
2. To be admitted to a major, students must have a 2.0 average in the major field(s). Students with an average below 2.0 in the desired field(s) may seek probationary admission to the major, which must be approved by the department chair.

## Continuance in a Major

1. After being accepted into a major, students must maintain a 2.0 minimum average in the major field to continue as majors. If a student falls below a 2.0 grade point average in the major field, the student and the relevant department chair(s) and/or program coordinator(s) will be notified that the student can no longer continue as a major. The student must either declare a new major with at least a 2.0 average or apply to remain in the original major on probationary status. A probationary admission must be approved by the department chair/program coordinator(s). Students who are granted probationary status are placed on academic notice by the Academic Standing Committee.
2. Students who gain probationary admission to a major have two semesters in which to raise their average in the major field to a 2.0 or above. If at the end of the probationary period a student has not done so, the student must immediately find acceptance into another major or be suspended from the University.
3. Students who are dropped from a major and/or suspended from the University should consult with the associate dean of academic advising. Students who are suspended from the University may appeal their suspension to the Academic Standing Committee.
4. At the time of graduation, students must hold at least a 2.0 cumulative average in St. Lawrence courses taken in their major field.

## Major Programs

St. Lawrence University offers various types of majors. Some majors are housed within a single department; others involve concentrated work shared between two departments or between one department and an interdisciplinary program. The number of semester unit courses required for majors varies, but regardless of major, no student may be required to take more than 12 or permitted to take more than 14 units under a single departmental or program designation. See the Inventory of Registered Programs at the end of this section and the Courses of Study section of the Catalog for the list of majors and visit [www.stlawu.edu/academics](http://www.stlawu.edu/academics) for links to departments and programs.

### Multi-Field Major Program

The multi-field major program is designed for students who wish to study intensively in a multidisciplinary field but cannot achieve this goal through an existing major program. The multi-field program provides an opportunity for students to design their own program of study.

A student intending to pursue a multi-field major must submit a proposal for their individual plan of study to the Academic Advising Committee, which may approve it, invite revision and resubmission, or deny it.

A proposal for a multi-field major should be submitted during the student's sophomore year. The latest a student may submit a proposal is in the third week of the second semester of the junior year.

A student entering the multi-field program must fulfill the distribution, unit, and GPA requirements for graduation.

A student must have a 2.0 overall GPA to be admitted to the program and must maintain a 2.0 cumulative average in the multi-field major to continue in the program. Students should be aware that certain courses carry prerequisites and that these apply to the multi-field major as well as the departmental major.

## Double Major

For a double major, a student pursues concentrated work in any two established majors (see above list) and meets the requirements for each major. If the two majors lead to different degrees, the student may elect to receive either the B.A. or the B.S.

## Academic Minors

Academic minors extend the curriculum's flexibility while adding another medium of connection, coherence and integration to the student's course of study. A student who has declared a single major may elect one or two minors; a student who has declared a double major may elect only one minor.

Minors normally consist of five to seven courses, as defined by departments or programs. See individual program descriptions for details on specific programs. A minor may not be declared in the student's major, although a student may major in one foreign language and minor in another. Students must have earned a 2.0 GPA at the time of graduation in all courses taken in their minor. Courses counting toward the student's minor completion cannot be taken on a pass/fail basis after the minor is declared. See the Inventory of Registered Programs at the end of this section and the Courses of Study section of the Catalog for the list of minors and visit [www.stlawu.edu/academics](http://www.stlawu.edu/academics) for links to departments and programs.

## International and Intercultural Studies

St. Lawrence University supports off-campus programs in over 25 countries that allow students to enrich their majors, explore cultures in the US and beyond its borders, gain cross-cultural perspectives and skills, and prepare to be responsible global citizens. St. Lawrence University operates seven of its own semester- and year-long off-campus programs, which include deep cultural immersion and course work before, during, and after the off-campus program. The University also partners with other selected programs in different regions. Some involve direct enrollment in foreign universities. Others are operated by US colleges and universities or respected study abroad program providers. Students contemplating off-campus study should work with the CIIS staff and their on-campus academic advisor, before, during, and after their time away to integrate their off-campus study into their four-year program of study. For more information, visit The Center for International and Intercultural Studies at <https://www.stlawu.edu/ciis>.

The Peace Corps Prep Certificate Program is housed in the Center for International and Intercultural Studies. St. Lawrence University's Peace Corps Prep Certificate Program (PCPP) help students to acquire

the knowledge, skills, and experience needed to serve in the U.S. Peace Corps. The program is open to both domestic and international students as the program works to increase your competitiveness in the job market by expanding global awareness and preparing students for international careers. Participants build knowledge and skills through coursework, service learning, and field work. By choosing the path of the PCPP, students join a community of those dedicated to international service and collaboration. For more information about the program application, see the following link

<https://www.stlawu.edu/offices/ciis/opportunities-students/peace-corps-prep-certificate>.

## Academic Regulations

### Academic Integrity

Refer to the Constitution of the Academic Honor Council in the Student Handbook:

<https://www.stlawu.edu/documents/student-handbook>.

### Student Records

The Family Educational Rights and Privacy Act (FERPA) of 1974, as amended, became effective on December 31, 1974. The purpose of the act as it pertains to post-secondary institutions is twofold: to assure students access to their educational records and to protect an individual's right to privacy by limiting the sharing of student records without their consent.

This information is made available to all students in accordance with the requirement that they be informed of the rights afforded them by the act. Specifically, students are advised of their rights as follows:

### Records Available to Students

Matriculated students have "the right to inspect and review any and all official records, files, and data... including all material that is incorporated into each student's cumulative record folder and intended for school use or to be available to parties outside the school...." St. Lawrence University defines "official records, files and data" and "cumulative record folder" to be the student's records as maintained by the student life, registrar's, career services, business and financial aid offices and the education department.

The law requires the University to respond to a student's request to see the official record or the cumulative record folder by establishing "appropriate procedures for the granting of a request...within a reasonable period of time, but in no case more than forty-five days after a request has been made."

A student's file in the student life office includes the student's initial application, personal data forms, disciplinary records and records of communication with the student and the student's family from various University representatives. The registrar's office maintains the official academic record.

The amended act clarifies that recommendations written before December 31, 1974, are not available to students and others unless approved by the writer. Recommendations written after that date are open to students unless the student waives this right. All students are urged to clarify this when requesting a recommendation.

### Hearings to Challenge a Record

Students must be afforded "an opportunity to ensure that the records are not inaccurate, misleading, or otherwise in violation of (their) privacy or other rights." Further, provisions must be made "for the correction or deletion of any inaccurate, misleading, or otherwise inappropriate data" contained in the

official record. Formal procedures for challenging such information are detailed in the Student Academic Grievance Procedure section of the Student Handbook online.

## **Rights of Third Parties to Access Records**

The University may disclose personally identifiable information from a student's education records only with the written consent of the student, except: (1) to school officials (i.e., persons employed by the University in an administrative, supervisory, academic, research or support staff position; a person elected to the Board of Trustees; a person or company employed by or under contract to the University to perform a special task, such as an attorney or auditor; or a student serving on an official committee or assisting another school official in performing his or her tasks) who have legitimate educational interests (e.g., the need to review education records to fulfill their University-related responsibilities); (2) to officials of another school at which the student seeks or intends to enroll (note: it is the University's policy to forward education records to other agencies or institutions in which the student seeks or intends to enroll only with written consent from the student; the University reserves the right to forward said records upon the request of such agencies or institutions, without written consent from the student after a reasonable attempt has been made to contact the student); (3) to authorized representatives of certain FERPA-designated federal and state agencies for the enforcement of federal and state legal requirements; (4) in connection with a student's application for or receipt of financial aid, as necessary to determine the eligibility, amount or conditions of the financial aid, or to enforce the terms and conditions of the aid; (5) pursuant to court order or lawfully issued subpoena, but only after reasonable attempt to notify the student of the order or subpoena, unless the subpoena prohibits disclosure of the existence or contents of the subpoena or information furnished in response to the subpoena; (6) to accrediting organizations to carry out their functions; (7) in connection with health and safety emergencies, as permitted by law; (8) to an alleged victim of any crime of violence or the results of any institutional disciplinary proceeding against the alleged perpetrator of that crime with respect to that crime; and (10) as otherwise permitted by FERPA and its implementing regulations as amended from time to time.

All persons desiring access to such records, except on the grounds of exceptions 1, 5 (when the subpoena orders confidentiality) or 7 above, shall be required to sign a written record access form, which shall be kept in the student's file.

With the exception of disclosures covered by the exceptions noted above, prior to release of personally identifiable information from a student's education records, and subject to the rules regarding "directory information," below, written consent must be received from the student specifying the records to be disclosed, stating the purpose of the disclosure and identifying a password for each party or class of parties to whom the disclosure may be made. The authorization for release shall be kept with the student's file.

Whenever the University discloses personally identifiable information from an education record (except as to disclosures (1) of "directory information," (2) to the student who is the subject of the record or (3) to the parent of a dependent student) it shall inform the party to whom it is disclosing the information that it may not be further released or disclosed without the consent of the student or the parent of a dependent student.

## **Records Unavailable to Students**

Students do not have the right of access to their parents' confidential financial statements or to medical, psychiatric or "similar records that are used solely in connection with treatment and only available to

recognized professionals or paraprofessionals in connection with such treatment.” Students, however, could have a doctor or other qualified professional of their choice inspect their records.

## Directory Information

The University continues to have the right to release “directory” information, limited to name, address, telephone number, e-mail address, student photo ID, dates of attendance, enrollment status, major field(s) of study, degrees and awards received, and the most recent previous educational agency or institution attended by the student, without first obtaining the consent of the student. Students or parents wishing to have the information excluded from directories should contact the dean of student life.

Copies of the act are available in the Student Life office, and students are encouraged to discuss any aspect of the law or their individual file with the vice president and dean of student life. Copies of any or all parts of the record are available to the student at the student’s expense.

## Transcript

A transcript of the academic record of each regularly enrolled student is maintained in perpetuity in the Registrar’s Office. For information on the transcript and requesting copies see <https://www.parchment.com/u/registration/32525/institution>.

## Credit Toward Graduation

Candidates for baccalaureate degrees may earn credits toward graduation from St. Lawrence University in one or more of the following ways:

1. By satisfactory completion of courses offered by St. Lawrence.
2. By satisfactory completion of courses taken through cross-registration from one of the other members of the Associated Colleges of the St. Lawrence Valley (SUNY Canton; SUNY Potsdam; Clarkson University). Up to two such courses per year (September 1–May 30) may be taken. Since these courses are considered as taken in residence at the institution where they are taken, the general policies on transfer credit apply to them, barring possible exceptions by the academic dean for certain programs of study. The credit value of such courses, however, is calculated in the same way as that described in II.A.2, below, regarding transfer of credit from other institutions.
3. By transfer from an accredited institution of higher education of approved liberal arts course credits, with grades of at least 2.0 (C) or equivalent, as submitted on an official academic transcript sent directly to St. Lawrence from the other institution. This includes P (Pass) in P/F (Pass/Fail) systems from other accredited collegiate institutions, accepted only in cases where the transcript clearly certifies that P is the equivalent of 2.00 or higher. (See II.A, below). A maximum of eight units are transferable to St. Lawrence if taken by a matriculated student.
4. By Advanced Placement tests in which a score of 4 or higher is achieved, as administered by the College Entrance Examination Board, Princeton, N.J. (See II.B, to follow.)
5. By International Baccalaureate Higher Level Examinations in which a score of 5 or higher is achieved. Credit is not awarded for Standard Level examinations. Course credit is regarded as transfer credit and is determined by the registrar in consultation with the appropriate department chair. Credit for course equivalence and distribution credit is similar to Advanced

Placement credit. See below. [Note: College Level Examination Program (CLEP) credit is not accepted.]

## Credit from Other Sources

### General Policies

The following general policies apply to credits earned or sought from sources other than courses offered by St. Lawrence and courses taken by cross-registration.

1. **The student must be matriculated** as a full-time student at St. Lawrence University, with the exception of an employee of St. Lawrence University or other member of the Associated Colleges who may be part-time.
2. **At entrance, acceptability of credit is determined by the registrar**; at other times it is determined by the registrar and/or committee in consultation with the appropriate department chair(s).
3. **Credit is given no grade value** and does not become a part of the student's cumulative or major or minor GPA. For a unit to be transferred, it must have a minimum grade of C or 2.0 on a four-point system.
4. **Upon entrance, the equivalent of two years' work** may be counted toward graduation. Sixteen units must be completed at St. Lawrence.
5. **Matriculated students in good academic standing** (having a minimum GPA of 2.0 and the proper number of completed units) may transfer up to eight units of credit.
6. **Matriculated students on academic notice** may apply to pursue coursework at another institution. However, the approved credit will not appear on the student transcript until the student is back in good academic standing at St. Lawrence University.
7. **Transfer credit will not be granted** to students while they are under academic suspension. A student readmitted from academic suspension may request the registrar for transfer of credit earned elsewhere while under suspension.

### Specific Policies

In addition to the general policies, the following specific policies apply to particular means of obtaining credit.

1. Transfer credit from other institutions
  - a. To be assured of receiving credit toward graduation from St. Lawrence University, matriculated students must obtain prior approval of individual courses or programs of study. If they intend to study off campus during a regular fall or spring semester, such approval must be obtained from the CIIS committee and the appropriate department chair(s). Off-campus summer programs are approved by the Registrar and the appropriate department chair(s).
  - b. The credit value of transferred work undertaken during an academic year by a matriculated student shall be assessed against the standard of the expected normal full load of the host institution. In other cases:
    - i. A maximum of two three-semester-hour courses may be transferred to St. Lawrence as one St. Lawrence unit each.

- ii. Beyond two courses, credit value of semester-hour courses shall be assessed in accordance with a table of values maintained by the registrar. wherein 1 unit at St. Lawrence University is the equivalent of 3.6 semester or credit hours.

2. Advanced placement and credit

Advanced placement and credit toward graduation are granted to students who achieve a rating of 4 or 5 on the Advanced Placement Examination in the following subjects:

AP Course	SLU Equivalent with Section
Art 2D Design	ELEC NCE (new as of fall 2018)
Art 3D Design	ELEC NCE (new as of fall 2019)
Art History	AAH NCE
Calc AB	MATH 135 (or subcode BC exam)
Calc BC	MATH 135 and MATH 136
Chemistry	CHEM 103
Chinese Language	ELEC NCE
Comp Gov and Politics	GOVT 105
Comp Gov and Politics (for credit only)	GOVT NCE (to be used when student taking GOVT 105 on campus)
Computer Sci. Principles	CS 140
Computer Sci. A	CS 219 (was CS 140 until end of spring 2018)
Drawing	ELEC NCE (new as of fall 2018)
Econ-Micro	ECON 100
Econ-Macro	ECON 100
Econ - Macro AND Micro	ECON 100/ECON NCE
Eng LANG/COMP	ELEC NCE
Eng LIT/COMP	ENG 190
Environ Studies (Sci)	ENVS 101
European History	HIST 102
French Language	FR 103
German Lang/Culture - score 4*	GER 101
German Lang/Culture - score 5*	GER 101/GER 102
Human Geography	ELEC NCE

AP Course	SLU Equivalent with Section
Japanese Lang and Culture - score 4	ELEC NCE
Italian Lang and Culture	ELEC NCE
Music Theory	MUS 100
**Physics B	Awarded by dept – PHYS 103/ 104
**Physics C Part 1	Awarded by dept – PHYS 151
**Physics C Part 2	Awarded by dept – PHYS 152
Psychology	PSYC 101 Without Lab (PSYC-101NL)
Research	ELEC NCE
Spanish Language	SPAN NCE
Spanish Literature	SPAN NCE
Statistics	STAT 113
Studio Art	ELEC NCE
US Gov and Politics	GOVT 103
US Gov and Politics (for credit only)	GOVT NCE (to be used when student taking GOVT 103 on campus)
US History	HIST 103/HIST 104 (.5 unit each)
US History	HIST 103 (1 unit) OR HIST 104 (1 unit) to be used when already registered for HIST 104 or HIST 103
World History	HIST NCE

\*German scores of 4 will receive 1 unit of credit equivalent to GER 101. Scores of 5 will receive 2 units of credit equivalent to GER 101 and GER 102.

\*\*\*Laboratory Qualification: Students must demonstrate significant lab experience to the Physics department chair to receive any credit.

Note: Students earning a score of 4 or 5 on the General Biology AP exam may earn 1.25 units for Biology 102 if they successfully complete Biology 101. For a complete explanation of this option, refer to the “Advanced Standing” section of the Biology section in this Catalog.

Courses are acceptable in lieu of departmental prerequisites and fulfill distribution requirements, as indicated. The effect of advanced credit upon the department major requirements is determined by each department chair.

- A. International Baccalaureate and credit toward graduation are granted to students who achieve a rating of Higher Level Examinations in which a score of 5 or higher in the following subjects:

IB Exam	SLU Equivalent or General Credit
Biology	forward to dept
Chemistry	CHEM 103
Economics	ECON 100
English A1	ENG-NCE
English A2	ENG-NCE
English B	ENG-NCE
English A: Lang and Lit	ENG 190
English A: Literature	ENG 190
English NCE	ENG NCE
Film	DMF NCE
French	FR-104
Geography	ELEC-NCE
German (score of 5)	GER-101
German (score of 6 or 7)	GER-101 and 102
Global Politics	GOVT-108
Government NCE	GOVT-NCE
History	HIST- NCE
History Africa	HIST- NCE
History Americas	HIST-NCE
History Asia/Oceania	HIST- NCE
History Europe	HIST- NCE
Italian B	ITAL-104
Math Studies	MATH-135
Music	no credit
Philosophy	PHIL-100
Physics	forward to dept
Psychology	PSYC-101NL
Social & Cultural Anthropology	ANTH 102
Spanish A: Lang and Lit	SPAN-104
Spanish A: Literature	SPAN-104

IB Exam	SLU Equivalent or General Credit
Spanish A1	SPAN-104
Spanish B	SPAN-104
Spanish AB	SPAN-104
Theatre	PCA-125
Visual Arts	ELEC-NCE

## Registration for Courses

Continuing students who expect to be enrolled in the following term must register in April for the fall term and November for the spring term. Registration instructions and course listings are available to all students prior to designated registration deadline dates. Students are encouraged to meet with their academic advisors prior to registering for courses. Students who register late are subject to a fee of \$50.

## Course Load

In the fall or spring semester, full-time students may take any four courses regardless of their unit value, or five or six courses that total no more than 4.75 units, without incurring additional tuition charges. An overload consists of five or six courses totaling more than 4.75 units or more than six courses. During Summerterm, an overload consists of more than two units of credit. Full-time students registered for more than six courses or for five or six courses totaling more than 4.75 units and not meeting criteria for a course overload without additional charges will be charged an overload fee.

## Eligibility for Course Overload

Course overload registration is requested during the first seven days of the fall and spring semesters. Course overload during Summerterm must be approved by the Director of Summerterm. Timely completion of the petition is required. First-year students are not eligible for a course overload. Transfer students in their first semester at St. Lawrence are not eligible for a course overload.

## Course Overload Without Additional Charges

1. Full-time students who are in good academic standing and who are making normal progress toward their degree may register for up to 5.75 units without additional tuition charges during the fall or spring semesters. See Guidelines for Normal Academic Progress, below.
2. A student who fails to convert all incomplete (E) grades to final grades by the end of the drop/add period may not take the free overload course privilege even when other conditions are met.

## Continuing a Foreign Language

For information on continuing study of a foreign language at St. Lawrence, please see:

<https://www.stlawu.edu/offices/world-languages-cultures-and-media/information-first-year-students>.

## Registration Changes

It is strongly recommended that full-time students not reduce their course load in any semester to fewer than four semester course units without consulting with their advisor, the registrar and, when appropriate, the associate dean of the first year and the financial aid office. It is expected that a student will consider withdrawing from a course only in extenuating circumstances.

Students may not take a course load of fewer than 3.5 units in any semester without their student enrollment status or athletic eligibility status being affected. They must consult with their academic advisor(s) and the course instructor and submit a properly executed add/drop or withdrawal form obtainable through the Registrar's Office.

Students who begin the semester on part-time status, or who fall to part-time during the first month of the semester by dropping or withdrawing from a course (down to a total of fewer than 3.5 course units), will be certified as part-time students for New York state financial aid purposes, other private scholarships that require full-time certification, and repayment of student loans. They will lose their TAP and scholarships if they are part-time students. Foreign students, veterans and athletes who participate in an NCAA sport are also affected.

## Add/Drop Policy

During the first seven business days after classes begin in any semester or the first three days after classes begin in the Summerterm, a student may add or drop a course without a permanent record being made of the change. Students changing their schedules within the add/drop period must have written approval of the instructor of each course being added. Students may request from the Academic Petitions Committee a late schedule change with instructor and advisor permission. Approved late changes will result in a \$50 late change fee.

## Withdrawal from a Course

Twice before graduation, students are permitted to withdraw from a course. The withdrawal period extends from the eighth day of classes through the end of the 10th week of classes for fall and spring semester courses that meet over the entire semester. For courses that meet for half of a semester or during Summerterm, students may withdraw after the first three days (when drop/add ends) until the end of the third week. Academic advisor acknowledgement is required for course withdrawal.

The course remains on their transcript, and a "W" grade is entered by the registrar. If a withdrawal form, properly executed, is not submitted before the deadline, the student remains enrolled in the course, and is graded accordingly. Withdrawing from FYP or FYS is not permitted. Students should contact the Student Financial Services Office to determine if withdrawing from a course will jeopardize a New York State grant or scholarship. International students should contact the International Student Services Office to determine any effects on their student visa status.

Students may apply to the vice president and dean of student life for a medical withdrawal from a course, courses, or the entire semester during the semester for which the withdrawal is requested. Documentation from an appropriate medical, psychiatric, or psychological professional must be provided at the time of application. While on medical withdrawal from an entire semester, students must absent themselves from campus, unless the vice president and dean of student life expressly allows access. The registrar enters a "WM" grade for all enrolled courses for which a medical withdrawal

has been granted. A medical withdrawal from all courses continues for the remainder of the semester and in most cases continues for at least one additional semester.

The vice president and dean of student life may grant a medical withdrawal for the semester immediately preceding the semester for which the student is registered, provided (1) the withdrawal is for the entire semester and (2) the student has not yet started the subsequent semester and (3) in their judgment, application for the medical withdrawal could have been made and would have been granted for that semester. Only in consultation with the associate dean for academic advising, and under unusual, documented circumstances, may a medical withdrawal be granted for semesters prior to the last semester for which the student was registered.

In cases of both voluntary and required semester medical withdrawal, the policy on refunds outlined on the Student Financial Services website will apply: <https://www.stlawu.edu/offices/student-financial-services/refund-policy> and <https://www.stlawu.edu/offices/student-financial-services/tuition-refund-plan>.

Students will be obligated to adhere to any readmission requirements outlined by the vice president and dean if they desire to return to St. Lawrence University. Students must provide documentation from a medical professional that the medical situation that led to their withdrawal has been addressed and they are able to resume their studies.

## Leave of Absence

A leave of absence may be granted by the dean of student life to any student who is in good academic and social standing. Such a student may be readmitted at the start of a term provided that: (1) readmission is within three terms of the student’s leaving, (2) the University receives a 30-day notice of the student’s intention to return and (3) there is housing and classroom space available.

## Grades

The grading system in use at St. Lawrence is described below:

### Grade Point Equivalent per Course Unit

Course Unit	Grade Point Equivalent
4.0	Excellent
3.75	
3.5	
3.25	
3.0	Good
2.75	
2.5	
2.25	
2.0	Satisfactory
1.75	
1.5	

Course Unit	Grade Point Equivalent
1.25	Satisfactory
1.0	Lowest Passing Grade
0.0	Failure

### St. Lawrence Grading System

Designation	Definition	Credits
E	Incomplete	0.0
P	Pass under Pass/Fail option	1.0
W	Withdrawn	0.0
WM	Withdrawn Medical	0.0
CMP	Work Completed Satisfactorily for non-credit course component	0.0
X	See below	0.0
NGS	No Grade Submitted by Instructor	0.0

### X grade

Assigned at the end of a semester for work in a designated course that will be completed in the following semester. Only those students specified by the mid-term of the initial semester are eligible to receive an X grade. This grade is not to be confused with the incomplete (E), which is given to a student who fails for a valid reason to complete the work of a course within the period prescribed for that course.

### Incomplete (E)

Assigned only when, as a result of unusual or extenuating circumstances (e.g., illness), some part of the required work for a course is left unfinished. In such a case, the instructor informs the department chair and agrees with the student on conditions, preferably in writing, for removal of the E. The student is expected to fulfill these conditions in good time, in the ensuing semester, for the instructor to evaluate their work and report a permanent grade to the registrar, generally by the end of the second full week. If no grade is reported, the E is replaced by 0.0 (Failure). The instructor may set an alternate deadline if they wish.

The department chair may request further delay from the registrar, but this delay may not be longer than the term. If the student is not in residence during that term, the delay may be extended for one additional semester. Further extension must be requested of the dean of academic affairs and is unusual since the passage of time often brings changes in instructor and course content.

It is the responsibility of the student to see that conditions for the removal of a grade of E are established and met.

## Pass/Fail

Before graduation, a student is permitted to elect up to four semester course units of work to be graded Pass/Fail. The purpose of the option is to encourage students to explore new areas of study in which they are interested but have little or no background, not to justify reduced effort in a course. The Pass/Fail option may be chosen for semester course units taken to satisfy distribution requirements or any elective semester units outside the major or minor. The Pass/Fail option is subject to the following limitations:

1. Neither the First-Year Program nor the First-Year Seminar may be taken on a Pass/Fail basis.
2. Courses counting towards the student's major or minor completion cannot be taken on a Pass/Fail basis after the major or minor is declared.
3. No more than one optional Pass/Fail course can be taken in any semester.
4. The Pass/Fail option requires that the written consent of the instructor and acknowledgment by the academic advisor be submitted to the registrar by the end of the ninth week of classes in the fall and spring semesters. In summer session or courses that meet only half of the fall or spring semester, students may avail themselves of the option by the midpoint of the course as determined by the registrar.
5. A student must attain a minimum of a 1.0 grade to receive a Pass for the course.

Students should be aware that grades of 0.0 (F) are calculated in the grade point average. Although the P grade is not calculated in the grade point average, P grades may place students at a competitive disadvantage when they apply for admission to some graduate or professional schools. Students choosing to take a course Pass/Fail in a given semester will not be eligible for the Dean's List in that semester, if the total graded units become less than 4.0 units.

If no Pass/Fail option is allowed in a course, the instructor will indicate that policy in the course syllabus.

## Repeating Courses

When a student repeats a course, the higher grade will be computed in the cumulative average. Grades from both attempts will remain on the transcript. A repeated course does not earn additional credit toward graduation unless the first attempt received a failing grade.

1. If a student's grade is lowered below the level required by the major due to academic dishonesty, the student may retake the course, but only with the agreement of the department chair and only on a pass/fail basis, even if the major has already been declared. The original grade remains on the student's transcript.
2. If a student fails a course due to academic dishonesty and the course is not required for the major, the student may not retake the course.
3. If a student's grade is lowered due to academic dishonesty and the course is not required with a higher grade for the major, the student may not retake the course.
4. In all other cases, a student who wishes to retake a course must submit a petition to the Academic Petitions Committee. The petition must provide a more in-depth explanation of the student's reason(s) for retaking the course than merely stating "to raise my GPA." Pending the Committee's approval, the student may register to retake the course only after the pre-registration process is complete by submitting an add/drop form.

Students should be aware that financial aid, visa status, or veterans' benefits may be affected by a repeated course. Students should contact the Financial Services and the Financial Aid offices to determine if repeating a course would jeopardize a grant or scholarship.

## Distinction and Honors

Students can be placed on the Dean's List each semester by achieving a semester GPA of 3.6 or higher (and satisfying other criteria as detailed at the link below). At graduation, degrees with distinction are awarded cum laude, magna cum laude, and summa cum laude, and students can earn departmental honors. See <https://www.stlawu.edu/offices/registrar-office/distinction-and-honors>.

## Academic Petitions Committee

Students occasionally experience extenuating circumstances that interfere with their intent to follow rules and procedures regarding various facets of University life. Students may request consideration of an exception of the Academic Petitions Committee. For further details, see <https://www.stlawu.edu/registrar/resource/records-academic-petition>.

## Academic Standing

### Satisfactory Academic Progress for Financial Aid and New York State-Sponsored Grants and Scholarships

Please refer to <https://www.stlawu.edu/offices/financial-aid-office/satisfactory-academic-progress> to view the Satisfactory Academic Progress requirements for financial aid.

### Acceptable Academic Progress

Normally, acceptable academic progress is defined as (1) earning the minimum number of course units as indicated in the Guidelines for Acceptable Academic Progress (below) and (2) maintaining a cumulative GPA of 2.0 or higher.

#### Guidelines for Acceptable Academic Progress

End of Term	Units Completed
1	4.5
2	9.0
3	13.0
4	17.0
5	21.0
6	25.0
7	29.0
8	33.5

## International Students

International students under F- and J-type visas are required to carry and complete at least 3.5 units of work each semester. For the purposes of this calculation, a withdrawn course does not count toward this required 3.5 unit total.

## Guidelines for Academic Notice

Students will be placed on academic notice if they fail to meet satisfactory levels of performance as reflected by one of three measures: cumulative GPA, semester GPA, or major GPA.

### Cumulative GPA

Students are placed on academic notice if their cumulative GPA falls within the following range based on terms completed:

Completed Term(s)	Minimum Cumulative GPA
1—4	1.50—1.99
5—7	1.75—1.99
8—10	< 2.0

If their progress is deemed not satisfactory, they are placed on academic notice and receive letters that indicate that they must (1) earn a semester GPA of 2.0 or above in their first semester on notice and (2) raise their overall GPA to a 2.0 or higher in the ensuing semester, or they will be suspended. Students on notice should carry a full course load of at least four courses worth at least one unit each. Any exceptions must be approved by the associate dean of academic advising.

Students on academic notice are expected to work with the coordinator of academic development, the coordinator of academic support, the coordinator of academic engagement, or the associate dean of academic advising, as well as their academic advisor, to plan a program to address their academic situation. For more information, consult with the associate dean of academic advising.

### Semester GPA

Any student with a semester GPA below 1.75 will be placed on academic notice.

### Major GPA

Students whose GPA in their major (i.e., the average of grades in courses applicable to the major) falls below 2.0 will be placed on academic notice. Students whose GPA in their declared major remains below 2.0 for two semesters, and who are unable to find a suitable probationary major, will be suspended. Students on continuing major notice (after the first semester on major notice) are expected to work with the department chair, their academic advisor, and a representative of academic advising to plan a program to address their academic situation and the terms of continuance in the major.

## Guidelines for Academic Suspension

Students who fall into one or more of the following categories will be suspended:

1. First-year students (including first-semester first-year students) or sophomores with cumulative GPAs of less than 1.5 and juniors and seniors with cumulative GPAs of less than 1.75.
2. Students who earn a semester GPA below 1.0, regardless of their cumulative GPA.
3. Students on academic notice who do not earn a semester GPA of 2.0 or above in their first semester on notice, or do not increase their overall GPA to 2.0 at the end of the following semester.
4. Students who have less than a cumulative GPA of 2.0 in their major for two consecutive semesters and who cannot find a new or probationary major.

Any incomplete (E) grade earned may be calculated as a 0.0 when the Academic Standing Committee reviews grades at the end of the semester.

Suspended students may apply for readmission after one semester, although two semesters away is often advisable. Suspended students are not considered St. Lawrence University students and are not eligible to receive credit for or take courses at the University.

The following table shows the cumulative GPA that will lead to suspension.

End of Term	Minimum Cumulative GPA
1—4	< 1.50
5—7	< 1.75

## Appeal of Academic Suspension

Suspended students who can document extenuating circumstances have the right to appeal to the Academic Standing Committee. Appeals, which will be reviewed by the committee and the dean of academic affairs, should be directed to the associate dean of academic advising. For students on academic notice who are subject to suspension, the Academic Standing Committee will examine whether all conditions of their academic notice were fulfilled when considering an appeal. Questions about the appeals process should be directed to the associate dean of academic advising.

## Re-admission

Suspended students may apply to St. Lawrence University for readmission one semester after they were suspended. Applications for readmission are available from the student life office; students who wish to return from academic suspension must indicate this and follow the appropriate instructions for that situation. In addition to the completed application, the following information must be provided:

1. Transcripts of any academic work undertaken while suspended.
2. Letters from instructors of courses in which students were enrolled while suspended.
3. If applicable, letters of support from employers, counselors, or therapists with whom the student has worked since suspension.

An interview with the associate dean of academic advising may be required.

A student who has been suspended, and who has returned to St. Lawrence, may, under exceptional circumstances, be allowed up to three semesters to achieve a cumulative grade point average of at least 2.0.

## **New Student Admission**

Full admission and financial aid policies are located on the St. Lawrence University website under Consumer Information, see <https://ir.stlawu.edu/consumerinfo>. For more information see the Admissions and Aid website, <https://www.stlawu.edu/admissions>.

## **Expulsion**

Students may be expelled if they have been readmitted but fail to meet their academic readmission requirements as determined by the Academic Standing Committee. Expelled students who can document extenuating circumstances have the right to appeal to the committee. Appeals should be directed to the associate dean of academic advising. Expulsion represents a complete severance of ties to the University. Students who have been expelled from St. Lawrence University do not have the option to apply for readmission.

## **Academic Resources and Supports**

All students have their own style of learning. The Office of Academic Advising serves as a resource for all students at St. Lawrence, helping them identify academic areas of strength and areas in need of improvement. We also offer guidance in developing and implementing strategies to achieve greater academic success. Please refer to the Office of Academic Advising website for information on peer tutoring, academic counseling, skills assessment and support, academic opportunity programs, and accessibility services at <https://www.stlawu.edu/offices/academic-advising>.

## **Student Accessibility Services**

The Student Accessibility Services Office is a resource on campus to assist students who may have a specific learning style and or medical condition who may need academic accommodations, dietary needs, physical needs, special needs housing, accommodations for students who sustain temporary disabilities, as well as students who are requesting an emotional support animal.

For details, see <https://www.stlawu.edu/offices/student-accessibility-services>.

## **Opportunity Programs**

### **Higher Education Opportunity Program (HEOP)**

For details, see <https://www.stlawu.edu/offices/heop>.

### **Collegiate Science and Technology Entry Program (CSTEP)**

For details, see <https://www.stlawu.edu/offices/cstep-and-mcnair>.

## Writing Center

The Munn Center for Rhetoric and Communication's WORD (Writing, Oral Communication, Reading, and Design) Studio offers writing assistance to all students, from those writing FYP papers to seniors constructing honors theses. For additional information, see <https://www.stlawu.edu/offices/word-studio>.

## Peterson Quantitative Resource Center (PQRC)

To support students as they grow and develop their quantitative abilities, the Peterson Quantitative Resource Center (PQRC) offers mathematical, statistical and computational help in support of both course work and research. For additional information, see <https://www.stlawu.edu/offices/pqrc>.

## Libraries

There are three libraries at St. Lawrence University:

- The Owen D. Young Library (ODY) is the main campus library, with resources and services for research and study in the humanities and social sciences. ODY also houses the library's Digital Scholarship Studio, Special Collections and Archives, Information Technology, and the WORD Studio.
- Launders Science Library, located in Fox Hall, supports study and research in the physical and natural sciences, psychology, technology, and the history of science. Launders is also home to the Elberty Spatial Analysis GIS Lab.
- The Music Library supports the educational, research, and performance needs of the Music department and provides music resources to the entire university community.

The library collection includes 1 million books and ebooks, 150,000 online periodicals, and 8,000 streaming videos. You can search the library's resources using Discovery, the SLU library database. The libraries have over 120 other research databases for in-depth research in advanced courses. See <https://library.stlawu.edu/>.

## Information Technology

The St. Lawrence University information technology division supports and participates in the learning, teaching, research, and creative endeavors of students, faculty, and staff. See <https://www.stlawu.edu/offices/information-technology>.

## Richard F. Brush Art Gallery and Permanent Collection

The Richard F. Brush Art Gallery oversees an ambitious program of rotating exhibitions by regional, national, and international artists, as well as a permanent collection of over 7,000 art objects and cultural artifacts. Educational programs are designed to engage undergraduates from across campus. For more information, see <https://www.stlawu.edu/offices/art-gallery>.

## Community-Based Learning

Community-Based Learning (CBL) is a semester-long experience used to complement academic learning by expanding the walls of the classroom to include the community beyond SLU. Students who engage in CBL courses have the unique opportunity to actively engage in their learning. CBL also allows students to bring the world outside back into the classroom learning experience. CBL is not a graduation requirement; however, many departments allow CBL to serve as one way for students to satisfy the

experiential learning requirement of a major. For more information:

<https://www.stlawu.edu/offices/community-based-learning>.

## Outdoor Studies Program

The outdoor studies program at St. Lawrence University encompasses three constituent entities: the Outdoor Studies minor, the Adirondack Semester, and the Outdoor Program. For additional information, see <https://www.stlawu.edu/offices/outdoor-studies>.

## Sustainability Program

The Sustainability program at St. Lawrence University is an immersive experiential year-long program focused around sustainability leadership. Students live and take core classes at the Sustainability Farm, while continuing classes on campus towards their major and participating in campus life. For additional information and courses, see <https://www.stlawu.edu/offices/sustainability-program>.

## Pre-Professional Programs

### Health Careers

Undergraduate programs of study at St. Lawrence lead to professional training and degrees in medicine, dentistry, optometry, nursing, pharmacy, physical therapy, physician assistant fields, podiatry, and veterinary medicine, as well as allied health fields. For more information see <https://www.stlawu.edu/offices/biology/pre-health-program-php> or seek advice from a member of the Health Careers Committee. See also Pre-professional and combined programs on the majors, minors, and programs webpage: <https://www.stlawu.edu/academics>.

### Law

Students who are interested in law (or law in combination with business, public service, social work, and other fields) will be well served by the academic programs and pre-law advising at St. Lawrence. St. Lawrence has a LEAP (Law Early Admissions Program) agreement with Cornell University Law School, which allows a qualifying student to complete their studies at St. Lawrence early to begin law school. For additional information on law school advising and the Cornell LEAP, see <https://www.stlawu.edu/offices/academic-advising/pre-law>.

## Engineering Combined Programs

Students can combine a liberal arts education with an engineering degree through St. Lawrence's combined engineering program with five engineering schools (Clarkson University, Columbia University, Dartmouth College, Rensselaer Polytechnic Institute, and the University of Rochester).

Visit the Engineering Combined Programs web site at <https://www.stlawu.edu/offices/engineering-combined-programs>.

## Combined or Accelerated Graduate Business Programs

St. Lawrence University has agreements with the graduate schools at Clarkson University, Rochester Institute of Technology, Syracuse University, and Union College that allow students to plan their undergraduate program to include courses that serve as foundation courses for graduate study in business and/or finance. For more information visit <https://www.stlawu.edu/offices/masters-business-combined-programs>.

## Education

St. Lawrence University offers undergraduate courses that provide a pathway to careers in education.

The educational studies minor prepares students for a diversity of rewarding postgraduate opportunities. Recent educational studies graduates have attained jobs in educational policy or higher education administration and worked at educational nonprofits and museums. By minoring in educational studies students are in a position to: begin teaching at independent schools; attain teaching fellowships that lead to teacher certification; seek careers in education-related fields, such as educational policy, educational nonprofits, and corporate training; apply to leading graduate schools of education; and seek post-baccalaureate certification to become a public school teacher or school leader. For more information about this minor, see the Education section of the University Catalog or visit the Education Department's website (<https://www.stlawu.edu/offices/education>).

St. Lawrence also offers a master's degree that focuses on leadership studies for students interested in a variety of careers in education, coaching, and leadership broadly. For more information, see the Education Department's web page at <https://www.stlawu.edu/academics/programs/educational-studies> or <https://www.stlawu.edu/offices/graduate-programs>.

## Army and Air Force Reserve Officer Training

Interested students should visit <https://www.clarkson.edu/rotc/army-rotc> or <https://www.clarkson.edu/rotc/air-force-rotc>.

VA Educational Benefits: We are a proud partner of the Yellow Ribbon Program and of VA Educational Benefits, please visit: <https://www.stlawu.edu/offices/student-financial-services/va-educational-benefits> for more information.

## Summerterm

The University operates a diverse academic summer program that includes both undergraduate and graduate courses. For further information see <https://www.stlawu.edu/offices/academic-affairs/summer-term>.

## Auditing Courses

Area Resident Auditing is a program designed to serve the educational needs and interests of local residents at a low cost. "Auditing" means attending a class without working for or receiving formal credit. Although the program offers a top-quality educational experience, no written exams or papers are expected and no final grades are issued, but auditors may request a certificate of attendance from the instructor.

The program is open to adult residents of the North Country. An elementary or high school diploma is not required. High school students, faculty and regularly enrolled students at area colleges, and St. Lawrence faculty and staff are not eligible.

Persons who are eligible may audit a course by paying a registration fee of \$35 per course. The audit fee must be paid at the time of registration and is not refundable.

# Inventory of Registered Programs

## Bachelor of Arts/Bachelor of Science Programs

Program Title	Degree	Code	HEGIS
African Studies–Anthropology	BA	21401	2299
African Studies–Economics	BA	21402	2299
African Studies–Government	BA	21400	2299
African Studies–History	BA	21399	2299
Anthropology	BA	83565	2202
Anthropology–Canadian Studies	BA	19102	4903
Art and Art History	BA	09792	1001
Art and Art History–Canadian Studies	BA	81115	4903
Biology	BS	09784	0401
Biochemistry	BS	25090	0414
Biomedical Sciences	BS	42165	0499
Biophysics	BS	09786	0415
Business in the Liberal Arts	BA	36284	0517
Chemistry	BS	09810	1905
Computer Science	BS	22059	0701
Conservation Biology	BS	31841	0499
Data Science	BS	41813	1702
Digital Media and Film Studies	BA	42037	0605
Economics	BA	09817	2204
Economics–Canadian Studies	BA	81114	4903
Economics–Mathematics	BA	83566	2299
Economics–Mathematics	BS	83567	2299
English	BA	09800	1501
English–Canadian Studies	BA	81118	4903
English-French	BA	38362	4901
English-Spanish	BA	38363	4901
Environmental Studies	BA	22863	0420
Environmental Studies–Biology	BS	89035	0499

Program Title	Degree	Code	HEGIS
Environmental Studies–Chemistry	BS	89036	0499
Environmental Studies–Economics	BA	89039	0499
Environmental Studies–English	BA	22613	0499
Environmental Studies–Geology	BS	89037	0499
Environmental Studies–Government	BA	89040	0499
Environment Studies-Mathematics	BA	33903	0499
Environmental Studies–Philosophy	BA	19101	0499
Environmental Studies–Psychology	BS	89038	0499
Environmental Studies–Sociology	BA	89041	0499
Estudios Hispánicos	BA	09798	1105
Finance	BA	41812	0504
Francophone Studies	BA	09795	1102
Geology	BS	09812	1914
Geophysics	BS	09813	1916
Global Studies	BA	22915	0399
Government	BA	09819	2207
Government–Asian Studies	BA	86043	2299
Government–Canadian Studies	BA	81113	4903
History	BA	09818	2205
History–Asian Studies	BA	86044	2299
History–Canadian Studies	BA	81112	4903
History-Spanish	BA	38354	4903
History-French	BA	38355	4903
History-German	BA	38356	4903
History-Multi-language	BA	38357	4903
International Economics–French	BA	32963	4903
International Economics–German	BA	32962	4903
International Economics–Multi-Language	BA	32964	4903
International Economics–Spanish	BA	32961	4903
Mathematics	BS	09806	1701
Multifield Program	BA	78014	4901

Program Title	Degree	Code	HEGIS
Multifield Program	BS	78015	4901
Multi-Language Major	BA	80026	119
Music	BA	09793	1005
Neuroscience	BS	25089	0425
Performance and Communication Arts	BA	79187	1007
Philosophy	BA	09802	1509
Physics	BS	09807	1902
Pre-Health Chemistry	BS	42385	1905
Psychology	BS	09815	2001
Public Health	BA	42220	1214
Religious Studies	BA	09803	1510
Religious Studies–Asian Studies	BA	86045	1599
Religious Studies–Canadian Studies	BA	19103	4903
Sociology	BA	09820	2208
Sociology–Canadian Studies	BA	81116	4903
Statistics	BS	37398	1702

## Courses of Study

The courses listed in this Catalog reflect, as accurately as possible, what the University offers. Because changes in academic programs and staffing inevitably occur, no guarantee can be made that a particular course will be offered in a given semester or year. Moreover, each semester many departments offer courses that are not listed in this catalog because they are new or special topics. The list of available sections, published by the registrar for each semester, is a more accurate list of what is expected to be offered in that semester. Courses that satisfy distribution requirements are indicated in each semester's published list of available sections. Classes are held Monday through Friday; each full one-unit course normally meets three hours per week. Some courses having laboratories, studios or recitation sections may meet for more than three hours per week.

Requirements concerning majors, minors, tutorial work and comprehensive examinations in the various departments and programs are included in this Catalog (see each department or program description), and Major Requirements in the Curriculum chapter found on the web at <https://www.stlawu.edu/offices/academic-affairs/university-catalog>, or through the academic majors, minors and programs webpage at <https://www.stlawu.edu/academics/majors-and-minors> or can be determined by consulting the appropriate department chair or program coordinator. Graduate credit is offered only through the Education department. Information about graduate offerings is given in that department's

Catalog, which is available in the department's office in Atwood Hall, or at <https://www.stlawu.edu/offices/graduate-programs/resources>.

The course list that follows is organized alphabetically. The "Majors and Minors Offered" listed below provides a quick reference guide. For more on these, in addition to their respective entries in the pages that follow, go to <https://www.stlawu.edu/academics/majors-and-minors>.

## Majors and Minors Offered

### Department Majors

African Studies–Anthropology

African Studies–Government

African Studies–History

Anthropology

Art and Art History

Asian Studies–Government

Asian Studies–History

Asian Studies–Religious Studies

Biochemistry

Biology

Biology–Physics

Biomedical Sciences

Business in the Liberal Arts (offered only as second part of a double major)

Canadian Studies–Art and Art History

Canadian Studies–Economics

Canadian Studies–Estudios Hispánicos

Canadian Studies–English

Canadian Studies–Francophone Studies

Canadian Studies–German Studies

Canadian Studies–Government

Canadian Studies–History

Canadian Studies– World Languages

Canadian Studies–Religious Studies

Canadian Studies–Sociology

Chemistry and Pre-Health Chemistry

Computer Science

Conservation Biology  
Data Science  
Digital Media & Film  
Economics  
Economics–Mathematics  
English  
English-French  
English-Spanish  
Environmental Studies  
Environmental Studies–Biology  
Environmental Studies–Chemistry  
Environmental Studies–Economics  
Environmental Studies–English  
Environmental Studies–Geology  
Environmental Studies–Government  
Environmental Studies–Mathematics  
Environmental Studies–Philosophy  
Environmental Studies–Psychology  
Environmental Studies–Sociology  
Estudios Hispánicos  
Finance  
Francophone Studies  
Geology  
Geology–Physics  
Global Studies  
Government  
History  
History- French  
History- Spanish  
History- German  
History- Multi-Language  
International Economics–Estudios Hispánicos  
International Economics–Francophone Studies

International Economics–German Studies

International Economics–Multi–Language

Mathematics

Multi–Language

Music

Neuroscience

Performance and Communication Arts

Philosophy

Physics

Pre-Health Chemistry

Psychology

Public Health

Religious Studies

Sociology

Statistics

## **Multi-Field Major**

Self-designed

## **Minors**

African American Studies

African Studies

Anthropology

Arabic Studies

Art and Art History

Asian Studies

Biology

Canadian Studies

Caribbean, Latin American & Latino Studies

Chemistry

Chinese Studies

Computer Science

Data Science

Economics

Education Studies

Education (certification)

English

Estudios Hispánicos

European Studies

Film & Representation Studies

Francophone Studies

Gender and Sexuality Studies

Geology

German Studies

Global Studies

Government

History

Italian Studies

Mathematics

Music

Native American Studies

Outdoor Studies

Peace Studies

Philosophy

Physics

Public Health

Psychology

Religious Studies

Sociology

Sports Studies & Exercise Science

Statistics

## **Other Areas of Interest**

Business (see Business in the Liberal Arts; also 4+1 MBA, Curriculum section)

Communication Studies (see Performance and Communication Arts)

Creative Writing (see English)

Dance, Drama (see Performance and Communication Arts)

Engineering (see Pre-Professional Programs, Curriculum section)

Exercise Science (see Sports Studies and Exercise Science)

Fine Arts (see Art and Art History)

Foreign Languages, French, German, Spanish

(see World Languages, Cultures, and Media)

International Studies (see Global Studies)

Intercollegiate Athletics and Recreation (see Sport Studies and Exercise Science)

Latin American Studies (see Caribbean, Latin American & Latino Studies)

Political Science (see Government)

Journalism (see English)

Languages (see World Languages, Cultures, and Media)

Law (see Pre-Professional Programs, Curriculum section)

Medicine (see Pre-Professional Programs, Curriculum section)

Spanish (see Estudios Hispánicos)

Speech (see Performance and Communication Arts)

Studio Art (see Art and Art History)

Theater (see Performance and Communication Arts)

Visual Art (see Art and Art History)

Writing (see English)

# African American Studies

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Minor offered.

Visit the African American studies Web page at <https://www.stlawu.edu/offices/african-american-studies>.

## Minor Requirements

The minor consists of five courses from at least two different disciplines. Students may also count 3000- and 4000-level special topics and First-Year Seminar courses on African American studies towards completion of the minor. Courses for the minor may be drawn from the following:

### Art and Art History

211. African American Art and Visual Culture.

### English

230. Introduction to African- American Literature.

### Global Studies

102. Introduction to Global Studies II: Race, Culture, Identity.

204. Intergroup Dialogue

### History

207. Civil War and Reconstruction

263. African American History to 1865.

264. African American History, 1865-present.

272. The New South.

273. Civil Rights Movement.

280. History of Women in America.

331. Imagining the South.

340. Race, Ethnicity and Baseball.

### Philosophy

232. Africana Philosophy.

### Sociology

112. Inequality.

228. Race and Ethnicity.

310. Slavery, Race and Culture.

Minors are also encouraged to participate in St. Lawrence's off-campus program at Fisk University, a historically Black college in Nashville, Tennessee. Semester and short-term options are available at Fisk.

## African Studies

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Combined major and minor offered.

Visit the African studies webpage at <https://www.stlawu.edu/offices/african-studies>.

### Combined Major

African studies offer combined majors with anthropology, economics, government and history. Each combined major consists of five African Studies courses plus requirements from cooperating departments. The typical combined major has between 12 and 14 courses in total. Students are encouraged to begin with either AFS 101 or AFS 225. They must select courses from a range of disciplines. Students must complete a capstone course that is either an African Studies 400-level seminar or an interdisciplinary –independent project approved by the African Studies Advisory Board.

#### Anthropology and African Studies

Anthropology (ANTH)

Four core courses\* (4 units)

One 300-level Advanced Topics course\* (1 unit)

(must be taken in the Anthropology department)

Electives (200-level and above) (3 units)

(at least two should be dual-listed with AFS, and no more than two may be taken outside the department)

Capstone 400-level seminar (1 unit)

Five AFS courses, including a 400-level approved AFS course (5 units)

Total: 14 units

\*See Anthropology Major Requirements for the list of core and Advanced Topics courses and guidelines regarding study abroad.

#### Government and African Studies

Government (GOVT)

103. Introduction to American Politics. (1 unit)

105. Introduction to Comparative Politics. (1 unit)

108. Introduction to International Politics (1 unit) or

206. Introduction to Political Theory (1 unit)

290, 291 or 293. Research Seminar. (1 unit)

320. African Politics. (1 unit)

Two additional electives (2 units)

Five AFS courses, including a 400-level approved AFS course (5 units)

\* One of the above 100-level courses must be designated writing intensive (WI).

Total: 12 units

### **History and African Studies**

History (HIST)

10 courses: 10 units

1 must be a 299 Seminar on Historical Research Methods

4 from different regions (including one on African history)

No more than three courses at the introductory (100) level may be credited toward the major

1 SYE (which should be the HIST-AFS SYE)

Five AFS courses (5 units)

(One of which may be counted for both History and African Studies)

Total: 14 units

### **Minor**

The African studies minor consists of six African Studies courses. Students are encouraged to begin with either AFS 101 or 225 and must select courses from a range of disciplines. Also, they must complete a capstone course that is either an African Studies 400-level seminar or an interdisciplinary independent project approved by the African Studies Advisory Board.

### **Study Abroad**

Courses completed in the University's Kenya -Program (KSP) count toward completion of either the minor or the combined major. Students who apply for the KSP must complete an introductory course in African studies (AFS 101 or AFS 225 is especially recommended). Interested students should discuss their academic plans with one of the coordinators of the program as well as personnel in the office of International and Intercultural Studies. Students who complete the KSP are encouraged to declare a combined major or minor in African studies and in most cases will only need to complete the 400-level capstone requirements after participating on the program. Participants in the France program have a study trip to Senegal. There are also several opportunities for study in Africa during the summer. For more information on the Kenya Program, France program or summer study options, visit <https://www.stlawu.edu/offices/ciis>.

## Courses

The following African Studies courses are accepted for the African Studies combined major and minor.

### 101. Introduction to African Studies: History and Development.

This course serves as a broad, interdisciplinary introduction to the study of Africa. Course materials and readings are designed to give special emphasis to African initiatives and perspectives in shaping their own history. African interactions in a global context are emphasized to highlight issues such as the Atlantic slave trade and colonization. Other topics include cultural diversity, geography and environment, religious expression and development. At the end of the course students will be able to see how Africans have participated in world historical events and explain the many forces that have shaped African societies over the past 500 years. Also offered as HIST 108.

### 225. Peoples and Cultures of Africa.

This course surveys contemporary peoples and cultures in sub-Saharan Africa through the lens of three major themes. We will study the enduring importance and flexibility of African systems of social organization, and their relationship to religious beliefs and practices. We will learn about production, trade, and development in African economies, and about power, authority, and conflict in African politics. We will conclude by watching and discussing films which deal with various themes from our first three units. Throughout, we will note the centrality of social relationships to life on the continent.

### 229. Reading the Congo: History and Representations

In this course in English, we will explore the different representations of Democratic Republic of Congo, through novels, historical accounts, ethnography, movies or graphic novels. This region has been subjected to various types of cruelty and oppression, since the Belgium colonization. Works studied include Conrad's *Heart of Darkness*, excerpts from Hochschild's *King Leopold's Ghost*; Raoul Peck's film *Lumumba* and Mweze Ngangura's film *Identity Pieces*; the novel *Life and a Half* by Sony Labou Tansi, etc. The goals of the course are not only to explore Congo's history and culture, but also to think critically about the way it has been imagined and represented from the 19th century to the present day. Also offered through HIS 227, ENG 227 and FR229.

### 426. Exile and Identity in the Francophone African Novel.

This course in French explores the themes of identity and exile in the novels, films and graphic novels from writers and filmmakers from Francophone Africa such as Cheikh Hamidou Kane, Léonora Miano, Fatou Diome or Djibril Diop Mambéty and Rachid Bouchareb. Students will discuss the role of race, traditional culture, nationality, gender in the construction of national identity. This course is in French. This course is only offered in French.

## Departmental Offerings

### Anthropology

### 225. Peoples and Cultures of Africa.

- 251. Humans and Other Animals
- 425. Environmental Conservation in Africa.

**Global Studies**

- 262. Africa and Globalization.

**Government**

- 230. African Politics.
- 290. Foreign Aid (this section of GOVT 290 only)
- 328. Political Institutions in the Developing World

**History**

- 108. Introduction to African Studies: History and Development.
- 252. Conflict in Africa.
- 299. Seminar on Historical Research Methods, when relevant.
- 480. SYE: Contemporary Africa.

**World Languages, Cultures, and Media**

**Arabic**

- 101. Elementary Arabic.
- 102. Elementary Arabic.
- 103. Intermediate Arabic.
- 104. Intermediate Arabic.

**Francophone Studies**

- 229. Reading the Congo.
- 426. Exile and Identity in the Francophone Novel.

**Swahili**

- 101, 102. Elementary Swahili.

Students wishing to go on the Kenya program are strongly encouraged to take 101 before they leave. Swahili is a required course on the Kenya program and is offered at various levels. Swahili is also offered occasionally above the 102 level via independent study.

Teaching English to Speakers of Other Languages (TESOL)

- 308. Critical Aspects of Teaching English for Speakers of Other Languages.

**Music**

- 210. Musics of the World.

**Philosophy**

- 232. Africana Philosophy.

## Sociology

310. Slavery, Race and Culture.

## Off-Campus Program Courses

### France Program Courses

279. Culture of Francophone Africa.

### Kenya Semester Courses

Swahili is required, as is AFS 337 (Culture, Ecology and Development in East Africa), which is offered only on the Kenya Program.

Other courses offered in Kenya vary according to student demand and availability of instructors. Recent offerings have included courses that count for both African Studies and the following departmental credit: anthropology, biology, conservation biology, environmental studies, gender studies, global studies, government, history and sociology. For more on the current offerings in Kenya see <http://blogs.stlawu.edu/kenya>.

# Anthropology

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Major and minor offered; also Anthropology–African Studies major.

Visit the anthropology department webpage at <https://www.stlawu.edu/offices/anthropology>.

## Major Requirements

The major in anthropology consists of 11 courses and an experiential co-requisite component. The 11 courses are distributed as follows:

### Core Courses

- ANTH 101 (Human Origins)
- ANTH 102 (Cultural Anthropology)
- ANTH 103 (Introduction to Archaeology)
- ANTH 104 (Language and Human Experience)

There is no recommended sequence, but students should take the introductory courses before taking 300-level or 400-level courses in the same subfield.

#### 1. Electives (4)

Majors must take four additional courses at the 200-level or above. Up to two electives may be taken outside the department, whether on study abroad programs or in other departments on campus.

#### 2. Advanced Topics Course (1)

All majors must complete at least one 300-level Advanced Topics course. These Advanced Topics courses allow students to build on the anthropological knowledge, theories, and methods they

have learned about in lower-level courses, to delve deeply into particular topics, and to further develop their skills in reading, writing, speaking, research, interpretation, and/or analysis.

3. Capstone Experience (1)  
Senior majors must take at least one 400-level capstone seminar or complete an Independent Study project (489, 490) or Honors project (498, 499). Students should consult an Anthropology faculty member well in advance about the latter two options.
4. One additional Advanced Topics Course or Capstone Experience (1)

### **Experiential Co-requisite**

Majors must complete at least one of the following experiential learning options:

1. Study on an approved semester abroad program
2. Take an approved Community-Based Learning (CBL) course
3. Carry out independent anthropological research (short-term, summer, or semester)
4. Attend an approved field school in archaeology, cultural anthropology, primatology, forensics, or any other field of anthropology
5. Complete an internship relevant to anthropology
6. Master another language (as demonstrated by study through the 200-level)

### **Minor Requirements**

The minor in anthropology consists of seven courses that must include:

1. At least three of the four introductory courses: 101 (Human Origins), 102 (Cultural Anthropology), 103 (Introduction to Archaeology), 104 (Language and Human Experience);
2. At least two electives at the 200-level or above. One elective may be taken outside the department, whether on a study abroad program or in another department on campus
3. At least two courses at the 300-level (Advanced Topics) or 400-level (capstone course or independent study), taken in the department.

### **Anthropology–African Studies Major Requirements**

Anthropology offers a combined major with African Studies. A total of nine courses make up the anthropology part of the major; see African Studies for the required courses for that part of the combined major. Combined Anthropology–African Studies majors must take the four introductory courses that make up the core curriculum (listed above), one Advanced Topics (300-level) course, one (400-level) capstone or senior independent study project (489, 490, 498, 499), and three electives (200-level or above). At least two of the electives should be dual-listed with African Studies; no more than two electives may be taken outside the department. While the experiential co-requisite is not required of combined majors, we strongly urge African Studies combined majors to fulfill it, either on campus or through participation in an abroad program (e.g., the Kenya Program).

### **Honors**

Majors whose achievements in anthropology courses have been of high quality may pursue an honors project, sponsored by an honors advisor in the department and approved by an honors committee.

University guidelines specify that eligibility for honors requires a grade point average of 3.5 in all courses taken in the department.

A student should declare intent to pursue an honors project by registration during the second semester in the junior year, and agree to the departmental guidelines for honors projects. These are available from the department on request.

Majors and minors in anthropology may qualify for membership in the Iota chapter of Lambda Alpha, the national collegiate honor society for anthropology. Juniors who have completed a minimum of four courses in anthropology and have maintained a 3.5 GPA in those courses and a 3.3 cumulative GPA can apply. Additional details are available from the department.

## Courses

### 101. Introduction to Human Origins.

This course explores the nature of humanity using a biocultural approach. Students learn about the history and basic concepts of evolutionary thought, the fossil and genetic evidence for human evolution, the origins of language and culture, and human biological diversification. We analyze the human species with the rest of the primates by formulating explanations concerning the biological and cultural development of the primate order over the last 65 million years. Restricted to first- and second-year students. Offered every semester.

### 102. Cultural Anthropology.

This course introduces students to the comparative study of human cultures and societies. We will learn important anthropological concepts, methods and theories as we explore topics like subsistence and exchange, kinship and marriage, and politics and national identity. Throughout the course, we will learn about differences and similarities between human populations, we will consider how cultures and societies have changed over time, and we will reflect on our own culture and society. Restricted to first- and second-year students. Offered every semester.

### 103. Introduction to Archaeology.

A general overview of the branch of anthropology that investigates ancient societies through the material remains they have left behind. Students learn that archaeologists engage in detailed, systematic detective work aimed at answering a wide range of questions about human behavior. The course introduces students to the history of archaeology, the main goals of archaeological research and the basic techniques of excavation, site survey and artifact analysis, as well as the famous discoveries and excavations that have broadened our knowledge about the human past. Restricted to first- and second-year students. Offered every semester.

### 104. Language and Human Experience.

My goal in this class is to stoke your curiosity and attune your senses to the wonders of human language. Language is at the center of every human's experience, yet its inner workings usually remain unconscious and taken-for-granted. We will delve into the role of language in human experience by focusing on a few big questions: What might it be like to exist without language? How can we compare

human languages to other forms of communication among other species? Why are there many different languages rather than one species-wide language? How do humanity's languages differ and what do they have in common? How does language shape how we see the world? Fulfills SS and DIV13 requirements. Counts toward the Native American Studies minor. Restricted to first- and second-year students. Offered every semester.

#### 3000-3999. Special Topics Courses.

These special topics courses deal with various topics in anthropology at the 100 or 200 level. Offered occasionally.

#### 208. Ancient Civilizations.

Students learn how and why relatively simple egalitarian societies made the transition to state-level civilizations via an overview of several “primary” civilizations of the Old World: Mesopotamia, Egypt, China, and the Indus Valley. In comparing and contrasting these case studies, students explore key issues from an anthropological perspective: how archaeologists investigate these early social formations, what the material remains tell us about how they functioned and flourished, alternative explanations to cultural evolution, the critical role of the environment and geography, and how and why the civilizations declined. Offered in rotation. Also offered through Asian Studies.

#### 215. Science and Pseudoscience in Archaeology.

Lost continents, ancient astronauts, mysterious giants: In the mass media, archaeology has often been the subject of fantastic myths, frauds and endless speculation about what “really” happened. This course critically examines various popular and pseudoscientific claims about the human past, including the search for Atlantis, Noah’s Ark and the Great Flood, Stonehenge and the Piltdown Man, and introduces students to the scientific goals, methodology and techniques of archaeology. How do archaeologists “know” things — how do they work within logical theoretical frameworks, systematically explore the patterns and contexts of archaeological remains, and interpret the material and scientific evidence to draw educated conclusions about past human experiences? Offered in rotation.

#### 225. Peoples and Cultures of Africa.

This course surveys contemporary peoples and cultures in sub-Saharan Africa through the lens of three major themes. We will study the enduring importance and flexibility of African systems of social organization, and their relationship to religious beliefs and practices. We will learn about patterns of production and consumption in African economies, and about power, authority and conflict in African politics. We will conclude by examining the ways in which cell phone use is reshaping social relations, economic activity, and political engagement. Throughout, we will note the centrality of social relationships to everyday life on the continent. Offered in rotation in the fall. Also offered as AFS 225.

#### 241. Talking Politics.

In this course, we will think broadly about the place of rhetoric and persuasion in language, politics, and social life. What qualities make some forms of speech politically powerful? How does political powerful

speech vary from one society or historical period to another? In exploring the spectrum of political speech, we will seek to understand the ways in which language and power are intertwined. No background in anthropology will be assumed, but a fundamental curiosity about culture and communication is expected. Offered in rotation.

#### 242. Dealing With the Dead.

What unites us all as humans is the knowledge that we will eventually die. How we conceptualize and respond to death, however, is culturally dependent. Thus, culture tells us whether a person is dead, where they have gone, how we should treat and dispose of their body, how we should grieve and mourn them, and whether we can still interact with them once their body is dead. In this course, you will learn about death cross-culturally from an anthropological and interdisciplinary perspective. Through studying both contemporary and past populations we will examine death as a cultural construction and as an organizing and mobilizing force within societies. Other concepts examined include death as a rite of passage, death anxiety, mortuary archeology, and the politics of the dead. This is an interactive course that includes historical archival research, cemetery data collection, and laboratory sessions. Together, in studying death we will appreciate life.

#### 244. Childhood Across Cultures (CBL)

Are children angelic blank slates, demonic changelings, or a cheap source of labor? Do humans have an “instinct” to adore and care for children? Do children everywhere go through the same developmental stages? When does childhood begin and end? How should caregivers speak to a child? When and how is it appropriate for children to behave as sexual beings? Different cultures and historical periods exhibit a range of ways of imagining and enacting the early stages of human life. In this class, we will treat this diversity as a vast experimental laboratory for understanding the malleability of the human condition. By examining case studies of childhood across a variety of cultures and gaining first-hand experience with children living in the North Country, we will explore the question of what is natural and what is cultural about our ideas of childhood. This course fulfills the DIV 13 and SS requirements. Offered in rotation.

#### 251. Humans and Other Animals.

This course explores relationships between humans and other animals, as well as ideas that humans have about animals. We will examine the similarities and differences between humans and our closest relatives: the great apes and other primates. We will consider both wild and domestic animals through topics such as hunting and herding, wildlife documentaries and working animals, zoos and pets. Finally, we will delve into the ways animals inspire the human imagination in folktales, magic, and beliefs about shamans and shape-shifters. We will examine cases from around the world, with a special focus on Africa. Also offered as AFS 251. Students who take the course as AFS 251 must do both research projects on African topics. Offered in rotation in the spring.

#### 270. Plagues and Peoples.

This course will consider the origins, antiquity, biology, and impact of plagues on human societies from an anthropological, biocultural perspective. We will explore the models and general principles of

infectious disease to establish a framework for understanding plagues. Students will discuss specific plagues, both historic and contemporary, with a view to understand why they emerge, how their occurrence is intimately linked to human behavior, how they affect the human body, and how they transform societies. Offered in rotation. Fulfills the SS13 general education requirement. Counts as an elective for the Public Health minor. Offered in rotation.

#### 290. The Human Skeleton.

Curious about the human skeleton? Interested in how the human skeleton can be studied to understand past and present ways of life? In this course, students learn about the bones (including teeth) of the human body: how they grow and how they can be identified, reconstructed, and analyzed to answer complex anthropological questions regarding health, disease, stress, and trauma through time. Much of the course is hands-on and will involve handling real human skeletal material in a laboratory setting. Recommended for students interested in anthropology, forensics, law and health-related fields. Such as medicine and dentistry. Offered in rotation.

#### 320. Great Debates in Anthropology.

Western scholars have long sought to explain what it means to be human, and in anthropology we address such questions by studying the beliefs, behaviors and lifestyles of ourselves and other societies. Anthropologists have always sought to develop fundamental ideas about what it means to be human, especially what makes us social and cultural beings. In this course, students will learn how western thinkers have tried to explain 'the self' and 'the other' against a variety of social, political, and intellectual backdrops — from early European explorers confronting human diversity around the world, to more recent post-modern and globalization approaches that examine issues of power and agency. Fulfills the SS13 general education requirement. Offered in rotation.

#### 325. Evolution, Culture and Human Diversity.

What are the evolutionary mechanisms responsible for human diversity? Throughout evolutionary history, humans have been able to occupy virtually every region on the planet. In doing so, humans have undergone a process of cultural and biological diversification. This course offers a bio-cultural perspective to study the evolution and diversification of humanity. Students learn about the relationship among biology, culture and the environment, and discuss topics such as human differences in blood type, lactose intolerance, adaptation to hot and cold environments, adaptation to ultraviolet radiation, and eugenics. Recommended for students interested in biomedical sciences and related fields. Offered occasionally.

#### 331. Social Movements.

Anthropologist Margaret Mead once said, "Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has." This course examines contemporary social movements which organize and mobilize people to effect change, and which therefore challenge existing institutions, cultures, and social orders. We will consider issues related to participation, leadership, organization, strategy, scale, technology, and media representation, among others. We will read and discuss both theory and ethnography, and you will have the opportunity to

practice various research methods by working on two substantial research projects. Also offered as AFS 331. Students who take the course as AFS 331 must write their library-based research paper on an African topic. Offered in rotation in the spring.

#### 340. Myth, Magic, and Ritual.

In this class, we will explore the ways in which myth, magic, and ritual permeate social life. Drawing on ethnographic and theoretical studies of religious beliefs and practices ranging from text-based "world religions" to those of small-scale, oral societies, we will ask fundamental questions about human belief systems and examine how far we have come in answering them in over a century of theorizing. There are no prerequisites for this course, which is designed to be accessible to those with no background in anthropology, but a high degree of participation in class discussions and extracurricular research will be required. Offered occasionally.

#### 355. Social Life of Ancient Things.

This research methods course explores how archaeologists study artifacts as tangible remnants of past societies. All human societies produce and use material culture, and the relationship between humans and their human-made objects is a complex one. Archaeologists thus must work closely with material data from both past and present societies in order to better understand the technological, social and ideological dimensions of this relationship. This course will introduce students to strategies that help archaeologists figure out how artifacts were made, how they were used, and how they carried meaning within a culture, as well as the role of museums and colonial archaeology in the contemporary lives of ancient things. Offered in rotation.

#### 365. Forensic Anthropology.

How can bones help forensic scientists identify long-dead people? What is the role of forensic anthropologists in mass disaster and human rights investigations? Do shows such as "Bones" and "CSI" accurately reflect the role of forensic investigators? Through hands-on experience, students will learn how forensic anthropologists use skeletal materials and biological principles to recover, identify, and evaluate human skeletal remains. By the end of the course, students will have basic knowledge of the history and goals of forensic anthropology, human osteology, and an awareness of issues relating to the search, discovery, and recovery of human skeletal remains. Offered occasionally in the fall semester.

#### 4000-4999. Special Topics Seminars.

These advanced seminars deal with significant topics in anthropology at the 300 or 400 level.

#### 415. History of Archaeological Thought.

When faced with wondrous yet puzzling archaeological remains that cover the globe, what were the reactions of scholars and lay people 100 or 500 or 1,000 years ago? This course traces the intriguing history of archaeological investigation, from its antiquarian, "treasure hunt" origins to its modern incarnation as a systematic, scientifically driven discipline. We examine how the practice of archaeology has been shaped by social and political climates; explore the impact of changing notions toward

historical time, human progress and the “other”; and evaluate contemporary theoretical and methodological approaches to the study of the human past. Offered as needed.

425. Environmental Conservation in Africa.

This course investigates a wide variety of environmental conservation projects in Africa. We examine efforts by colonial and post-colonial states to preserve wilderness in national parks, and how local residents have responded. We study projects developed by international organizations which link environmental conservation with economic benefits for local people. Finally, we look at indigenous African efforts to conserve natural resources and to restore degraded lands. Throughout the course, we compare and contrast the perspectives and interests of conservation biologists, government officials and local residents, among others. Offered every fall. Also offered as AFS 425.

430. Advances in Biological Anthropology.

What does it mean to be human? How did humans become what we are today? These two questions lie at the heart of all anthropological discourse. This course explores the bio-cultural nature of the human species through a detailed examination of the various areas of study within biological anthropology. In doing so, the course presents a critical examination of issues, methods and theory in biological anthropology, approached from the following perspectives, each in their larger social, historical and intellectual contexts: paleoanthropology and evolutionary theory; skeletal biology and osteology; primatology; human biology; and population genetics. We will consider each of these approaches in their large social, historical, and intellectual contexts. Offered as needed.

440. Writing Culture.

How can we uncover the fragile meanings that motivate human behavior? How can we convey something of these meanings to a wider audience? Can these meanings form the basis for a scientific (i.e. generalizable, empirical, and falsifiable) study of humanity? This course addresses core methodological questions by engaging students in a practical workshop on ethnographic research and writing. During the course, students will collaborate on group research projects as well as designing and carrying out an individual ethnographic project. In both group and individual projects, students will gain experience in making structured observations, writing and revising field notes, conducting ethnographic interviews, and analyzing interlocutors’ narratives. As we explore these methodological issues, we will also engage the product of ethnographic research: ethnographic writing. In sampling a range of historical and contemporary ethnographies, we will explore where anthropology has been and ask where it may be going. Offered in rotation in the spring.

489,490. SYE: Senior Projects.

Open to qualified students who wish to pursue more specialized or advanced anthropological study and research on a specific topic under the direction of a faculty sponsor. Prerequisite: permission of the advisor.

498,499. SYE: Honors in Anthropology.

Open to anthropology majors with a grade point average of at least 3.5 in all courses taken within the department. Requires completion of a long-term project beginning late in the junior year under the guidance of a faculty advisor. Details are available from the department. Prerequisite: permission of the instructor.

## Art and Art History

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Major and minor offered with concentrations in art history or studio art or both areas.

Visit the art and art history department webpage at <https://www.stlawu.edu/offices/art-and-art-history>.

### Major Requirements

**Art History Concentration:** 10 Units (8 art history/2 studio)

Studio:

Drawing I (AAH131) and (1) studio elective

Art History:

AAH 116 **or** 117 Survey of Art History I or II (not both)

(7) other art history courses:

(1) non-Western art history course

(1) must be a 300- or 400-level course

(1) must be a 400-level course

\*One semester of a foreign language at the 200-level or higher may replace one 200-level art history course.

Students interested in attending graduate school in art history are strongly encouraged to study at least one foreign language appropriate to their areas of interest.

**Studio Art Concentration:** 10 units (7 studio/3 art history)

Students interested in a Studio Art Concentration should plan to take AAH 131 Drawing I, the prerequisite for upper-level studio art courses, as soon as possible.

Studio:

AAH 131

Drawing I

(5) studio electives. Students must take courses in at least 2 different media. Students must also have two semesters of study in at least one specific media/area.

AAH460 Senior Seminar in Visual Arts. *Offered each spring.*

### Art History:

AAH 116 or AAH 117 Survey of Art History I or II (not both)

(2) upper-level art history courses.

Students interested in pursuing a Master of Fine Arts degree are strongly encouraged to take a modern or contemporary art history course.

**Combined Concentration** (Art History/Studio Art): 10 units (5 art history/5 studio)

AAH 131 Drawing I

AAH 116 or AAH 117 Survey of Art History I or II (not both)

(8) upper-level courses split evenly between art history and studio (4/4)

at least 2 of these 8 courses must be at the 300- or 400-level

## Honors

Departmental honors are awarded according to University and departmental policy, as outlined in the *Student Handbook*. Departmental honors are different than the Honorary Society and are achieved only after successful completion of an honors project. A minimum GPA of 3.5 in all courses in the major is required. Students interested in pursuing an honors project should consult with their advisor and with the chair of the department early in their junior year to begin to formulate their honors projects. Honors Projects are year-long projects that emphasize independent work. Proposals are due spring semester of the junior year, one week prior to registration.

## Minor Requirements

Minor: 6 units

AAH 131 Drawing I

One art history course at any level

(4) other AAH courses with diversity of selection

\*\*Students participating in the New York City Semester Program will receive (1) unit for the Arts Management course (NC248G). This unit will replace one of the electives in their concentration.

## Courses

116. Survey of Art History, Part I.

A survey of the historical development of art forms from Paleolithic times to the late Middle Ages. Emphasis is placed upon the relationship between the formal aspects of art and the political and social history of a culture.

117. Survey of Art History, Part II.

A survey of the historical development of art forms from the Renaissance to the present. Emphasis is placed upon the relationship between the formal aspects of art and the political and social history of a culture. *Also offered through European Studies.*

202. Art of the Italian Renaissance.

An exploration of painting, sculpture and architecture in Italy from the late Gothic period through the High Renaissance and Mannerism. The course surveys the changing forms, themes and imagery of Renaissance art, within the larger cultural and political worlds of Florence, Siena, Rome, Urbino, Mantua and Venice. The course also introduces various ways of interpreting Renaissance imagery, through the study of religious iconography, humanism and academically based artistic theory; and through approaches ranging from the social history of art to gender-based interpretations. Prerequisite: AAH 116 or 117 or permission of the instructor. Offered on rotation. *Also offered through European Studies.*

203. Art of the Northern Renaissance.

A study of painting and sculpture in northern and central Europe from the late 13th to the late 16th centuries. This course focuses on such artists as Jan van Eyck and Albrecht Dürer, as well as such themes as the evolving representation of nature, witchcraft and other gendered imagery in art, and the early history of printmaking. Prerequisite: AAH 116 or 117 or permission of the instructor. Offered on rotation. *Also offered through European Studies.*

204. Baroque and Rococo Art.

A study of painting, sculpture and architecture in Europe during the 17th and 18th centuries. This course explores such artists as Velázquez, Bernini, Artemisia Gentileschi and Rembrandt, evocative images of nature and mystical experience, and major architectural and decorative programs. Prerequisite: AAH 116 or 117 or permission of the instructor. Offered on rotation. *Also offered through European Studies.*

206. Art of the Middle Ages.

A study of European art history from the collapse of the Roman Empire to the 14th century. Individual sessions explore the history of symbols, saints' cults, pilgrimages and popular piety, monasticism, medieval music, and the work of medieval stone masons, manuscript illuminators, metalworkers and sculptors. Prerequisite: AAH 116 or 117 or permission of the instructor. Offered on rotation. *Also offered through European Studies.*

207. Nineteenth Century European Art.

This course deals with art in the context of the tumultuous political and social history of 19th century Europe. Beginning with the French Revolution in the late 18th century, we will examine the ways in which art participated in the revolutionary, colonial, technological, economic, and gendered discourses of the era, covering well-known and often controversial works by such artists as David, Blake, Goya, Courbet, Manet, Cassatt, Degas, Rodin, Van Gogh, and Munch. *Also offered through European Studies.*

210. American Art.

A survey of American art from the 17th century to the eve of World War I. The emphasis is on painting, although other media are included. Prerequisite: AAH 117 or permission of the instructor. Offered on rotation.

211. African American Art and Visual Culture.

This course will examine the history of artworks produced by and about African Americans, while at the same time analyzing issues of the construction and contestation of racial and cultural identities through visual discourse. How do images create (or help to create) identities, and to what extent can they be used to combat as well as reinforce stereotypes? We will cover a wide variety of works by such artists as Edmonia Lewis, Henry Ossawa Tanner, Aaron Douglas, Archibald Motley, Jr., Palmer Hayden, Jacob Lawrence, Horace Pippin, Norman Lewis, Romare Bearden, Betye Saar, Adrian Piper, Kara Walker, Lorna Simpson, Glenn Ligon, and Carrie Mae Weems. Offered on rotation. *Also offered through African American Studies.*

212. Icons of Islamic Architecture.

An introduction to Islamic architecture through a focused study of a global tourist attraction: the Taj Mahal. Built as a lavish tomb for an empress in seventeenth century India, the Taj Mahal was a sign of immense privilege and social exclusion from its very inception. Over time, it became the object of fantasy for modern European travelers and a model for both British colonial architecture as well as opulent private homes in America. In what ways did elite men and women in medieval Islam shape and control architecture? Why are religious and political groups, archaeologists, and conservationists fighting for ownership of this building today? To appreciate the historical and contemporary significance of the Taj, students will also study comparative examples from other parts of Asia, the Middle East, Europe, and North America. By taking this course, students will: a) learn to recognize pluralism in Islamic architecture; b) critically examine how diverse social groups interact with Islamic architecture; and c) develop a capacity for critical self-reflection on how issues of power and justice play out in their own societies. Diversity (DIV13). No prerequisite. Offered every spring. *Also offered through Asian Studies.*

217. Buddhist Art and Ritual.

This course explores the historical and contemporary practices of Buddhist art and ritual in multiple geographical, social and cultural contexts. Examples of monuments, sculptures, paintings and ritual objects made for use by practicing Buddhists across Asia are studied to address questions of patronage and identity in various time periods. A large part of the course focuses on analyzing the contemporary reception and reshaping of traditional Buddhist ideas and art forms by diverse audiences around the world. The course also considers the changing context for Buddhist art and practice in Asia in an era of globalization. Diversity (DIV13). No Prerequisite. Offered every Spring. *Also offered through Asian Studies and Peace Studies.*

218. Arts of South Asia.

By examining sculpture, architecture, painting and film from South Asia, this course introduces students to the multiple cultural strands that contribute to the histories of countries such as Afghanistan, India,

and Pakistan. We also study art made by and for communities of South Asian origin in North America today. Issues of cross-cultural contacts, ethnicity and gender are emphasized, and we look critically at current debates surrounding methods of studying, collecting and displaying South Asian art. Diversity (DIV 13). No Prerequisite. Offered every Fall. *Also offered through Asian Studies.*

252. History of Modern European Art.

A critical historical investigation of art production in Europe from 1900 to 1945. Special emphasis is given to the strategy and tactics of the avant-garde, the revolutionary potential of art, the public reception of modernist art, the politics of the art market, the problem of abstraction and issues of gender. Movements covered include Fauvism, Cubism, Expressionism, Constructivism, Dada, and Surrealism. Offered in rotation. *Also offered through European Studies.*

254. A History of Contemporary Art.

This course introduces us to the most important developments in post-WWII art of the U.S. and Europe. Beginning with the emergence of an avant-garde in New York in the 1940s, the course investigates how artists and their publics attempted to redefine the role of art in the West. Movements studied include Abstract Expressionism, Pop Art, Minimalism, Earth Art, Conceptual Art, Feminist Art, and Postmodernism. Offered in rotation.

256. Art and Nature.

An overview of nature as a subject of artistic representation, in ancient Mediterranean and Mesopotamian cultures, and in the West from the Renaissance to the present. This course explores the ways in which depictions of nature have both reflected and shaped constructs of the natural world, by reference to religions, philosophies and moral values. Works of art to be examined include obvious examples of nature in art, such as landscape painting, and less obvious ones, such as villas and portraits, as well as earthworks and other environmental art created by contemporary artists. No Prerequisite. *Also offered through Outdoor Studies.*

319. Gender Issues in Asian Art.

This seminar-style course explores the following themes: the representation of gender relations in art, architecture, and film; the influence of gender constructs on the making and viewing of art; changing roles of women in society; and the relationship of gender, art and religion. A central learning tool is in-class student discussion and debate about art historical literature that takes a feminist approach to the interpretation of historical and contemporary examples of Asian art or makes gender roles their central research question. No prerequisite. Offered every Spring. Diversity (DIV13). *Also offered through Asian Studies.*

337. Architecture: Symbol and Ideology.

A socio-historical and symbolic exploration of architecture, gardens, and other aspects of built environments in Europe and the United States. Themes include architecture and mysticism; buildings

and gardens as metaphors of power, and as microcosms and sacred realms; the technological revolution; utopian worlds in modern architecture; and topics in current architectural theory.

355. Art Today.

Organized thematically rather than chronologically, this course engages with global contemporary art of the past two decades from a wide array of critical perspectives. Issues addressed include the interrelationships of contemporary art practices with developing technologies or “new media,” globalization and postcolonialism, identity politics and the body, and debates about “postmodernism” and consumer culture. Offered in rotation. Prerequisite: AAH 116 or 117.

389, 390. Special Projects in Art History, I and II.

Individual study for fine arts majors or especially qualified students. Prerequisite: consent of the supervising professor and department chair. Hours to be arranged.

4000-4999. Special Topics in Art.

Topics relate to the history, practice or theory of art. Open to all students, but depending on the topic prerequisites may be required. The content of each course or section of these 300-level or 400-level special topics courses varies and will be announced each semester.

430. SYE: Critical Theory and the Visual Arts

Designed for senior Art and Art History majors who are interested in graduate school or careers in the arts, this seminar explores the ways in which contemporary critical and theoretical discourses have challenged and, in some cases, transformed the practice of art history and criticism. Students will practice incorporating (or challenging) within their written work theoretical perspectives including those of structuralism and semiotics, post-structuralism and deconstruction, and feminist, queer, and postcolonial theory. Restricted to senior Art and Art History majors or by permission of the instructor. Offered every fall semester.

437. SYE Museums Seminar

A senior seminar focusing on art museums and the issues they currently face, as well as on the profession of museum curating and on curatorial discourse. Readings and class discussions cover such topics as the history of collecting and the origins of major museums; the roles of museums in constructing and communicating cultural difference; and the new museum, as redefined by post-colonial and post-modern thought.

489, 490. SYE: Independent Study.

An independent study for senior majors that builds upon the student’s prior work in art history and is directed toward developing superior skills in research and writing. A public presentation of one’s research project is required. Written proposals are required and are due one week prior to course

registration. Prerequisites: permission of the instructor and department chair (must be obtained the semester preceding the course).

495, 496. Senior Project: Honors in Art and Art History.

Details of the program are available from the department chair. An honors project involves yearlong independent research, culminating in a public presentation of the student's thesis. Prerequisite: a minimum GPA of 3.5 in all courses in the major. Proposals must be submitted in the spring semester of the junior year, one week prior to registration. Permission from the department is needed.

## Studio Courses

All studio courses are one-unit courses and meet five hours per week. Students interested in an Art and Art History major should plan to take AAH131 Drawing I, the pre-requisite for upper-level studio art courses, as soon as possible.

131. Drawing I.

This course is the prerequisite for all upper-level studio art courses. Potential majors and minors should take Drawing I as early as possible in their academic careers. The emphasis is on the development of perceptual, compositional, and critical drawing skills. Direct observation of still-life and figurative subjects lead to more abstract modes of expression. Various media are used. Offered every semester. Registration limited.

232. Drawing II.

This course continues to emphasize developing observational skills but focuses more on conceptual issues and ideas of expression. Various media are used. Prerequisite: AAH 131. Registration limited.

228. Color.

This course explores the interaction of color through the classic exercises of Josef Albers. Using color aid paper and paint, students will work through versions of Albers projects that explore the highly relative nature of color. A wide range of the unpredictable and elusive properties of color will be examined and manipulated. Students will develop a keen understanding of the function of color in art and design and sharpen their ability to perceive color relationships. The course will also examine ideas about color through artists' writings and by studying color-related exhibitions. Students will look at contemporary approaches to using color alongside Albers' established ideas. Prerequisites: AAH 131. Registration limited.

229. Painting I.

The emphasis is on developing an understanding of pictorial space in painting and use of basic elements such as color, value, form, composition and surface. Through structured projects, students learn fundamental painting techniques, make the transition from drawing into painting, and understand the

process of visual perception. Presentations of historical and contemporary artists complement the studio practice. Students are expected to invest significant work time outside of class, attend exhibitions, actively participate in discussions and critiques, and devise and execute their own final project. Prerequisite: AAH 131. Registration limited.

#### 230. Painting II.

Students continue to develop their understanding of the elements of painting while engaging a more complex set of problems and concepts. Studio practice is contextualized through discussions on issues in aesthetics, art historical antecedents and contemporary approaches to art. Requirements include a presentation on an artist, reading scholarly essays and artists' writings, response papers, exhibitions reviews, participation in discussions and critiques, and a visual journal. Students are expected to invest significant work outside the class. Prerequisites: AAH 131 and 229. Registration limited.

#### 238. Figure Sculpture.

Figure Sculpture progressively builds on the students' abilities to observe, model and render the human figure in three dimensions with accuracy, inventiveness and expression. Using ceramic clay and working from a live model, students will quickly learn and then practice the skills, tools and processes needed to accurately render figurative works. Prerequisite: AAH 131.

#### 239. Sculpture and Extended Media I.

This is a course for expressing one's ideas in three dimensions and through a variety of media. Students receive an introduction to the basic techniques, materials and terminology of 3D design, sculpture and contemporary art in general. Prerequisite: AAH131. Registration limited.

#### 240. Sculpture and Extended Media II.

A continuation of AAH 239. Students are expected to expand their ideas into more fully resolved and conceptually challenging works. Collaboration, fabrication/building techniques using wood and metal, investigation of tactical media approaches and other materials as determined by the student's interest and conceptual direction. Prerequisites: AAH 131 and 239. Registration limited.

#### 241. Printmaking I.

An introduction to relief and intaglio processes, this course involves drawing, processing, proofing, and editioning prints. Students are also exposed to historical and contemporary ideas and images related to making prints. Prerequisite: AAH 131. Registration limited.

#### 249. Ceramics I.

A course for expressing one's ideas through the most basic and malleable material – clay. Processes covered include traditional hand-building techniques such as pinch, slab, coil, solid and hollow modeling; as well as wheel throwing and other processes. While a wide range of processes is introduced, the

emphasis of this course will remain on the ideas communicated through the forms that students create. Prerequisite: AAH 131. Registration limited.

250. Ceramics II.

A continuation of Ceramics I. Students are expected to expand their ideas into more fully resolved and conceptually challenging works. Fabrication/building techniques such as press molding, slip casting, installation work and mixing media are discussed. More advanced surfacing techniques such as ceramic decals, printing on clay, experimental finishes and glaze chemistry are explored. Prerequisites: AAH 131 and 249. Registration limited.

259. Photography I.

Photo I is an introduction to the theory, techniques and process of black and white film photography. This course will emphasize photography's potential for creative problem solving and self-expression in an art context. This class will consist of slide lectures, presentations, and screenings featuring contemporary artists, camera demonstrations, in-class exercises, discussions and most importantly, critiques of your work. Students are expected to provide their own SLR camera. Prerequisite: AAH 131. Registration limited. *Also counts towards Digital Media and Film major.*

260. Photography II.

Photo II delves into the theory, techniques and processes of digital photography. This class will consist of readings, presentations, and screenings featuring contemporary artists, technical demonstrations, in-class exercises, discussions and most importantly, critiques of your work. Students are expected to provide their own Digital SLR camera. Prerequisites: AAH 131 and 259. Registration limited. *Also counts towards Digital Media and Film major.*

262. Video Art.

In this course, students will gain foundational skills of four-dimensional (moving) imaging software and to create animated and video-based art works. Students will study a range of artists who use video, animation, installation and interactivity in their work, and experiment with the creation of these types of work. By the end of the semester students should have knowledge of industrial standards in editing and effect software, as well as having the ability create art with advanced video functionality. Prerequisite: AAH 131. *Also offered as FILM 262.*

269. Digital Media and Culture I.

A combination studio/seminar course that explores the major theoretical issues surrounding the continually evolving culture of digital technology and the effects on various aspects of contemporary life including: aesthetics and perception, creative production, morality, contemporary art discourse, visual culture, entertainment, identity and other forms of social effects/affects. Studio projects will investigate the creative potential of digital photography, illustration, video and other formats. Projects will respond conceptually to theoretical issues that are being discussed in class. Prerequisites: AAH 131. *Also counts toward Digital Media and Film Major.* Registration limited.

270. Collaboration Across the Arts.

The direction of this course is determined largely by the unique combination of students who participate. Students form groups of two or three to work on a collaborative project of their own design reflecting their collective interests. For example, a pair of students may create a multimedia work that draws connections between image and sound. Students critique works in progress, study exemplary works, discuss relevant aesthetic issues, trace connections across media and consider strategies for collaborative work. Offered every year. Prerequisite: AAH 131 and permission of the instructor. *Also offered as MUS 270 and PCA 270.*

284. Book Art.

Artist's books are works of art that are made real in the form of a book. This course will examine the interplay between words and images as well as the sequential movement from page to page that this form offers. Students will explore how both original and appropriated texts and images are juxtaposed to create meaning. A variety of binding techniques and formats will be presented. Creative writing and image development will be emphasized in the course with revision and multiple drafts required for projects. Prerequisite: AAH 131. Registration limited.

329. Painting III/IV.

The primary aim is to examine painting in the 21st century through both theory and practice. The course investigates painting's historical antecedents as well as contemporary trends and currents. Students develop a coherent body of paintings that explores an individual direction and demonstrates knowledge of contemporary influences and historical precedents. Lectures, discussions, critiques and occasional visits to museums/galleries complement studio production. Students are required to do weekly readings and exhibition reviews, maintain a research journal and give an artist lecture at the end of the term. Prerequisites: AAH 131, 229 and 230. Registration limited.

341. Printmaking II.

A continuation of Printmaking I, with the introduction of lithography, screenprinting, and other processes. Further emphasis is given to thematic development in one's work. Study of contemporary printmakers and more specialized print techniques are pursued. Prerequisite: AAH 131 and 241. Registration limited.

360. Photography III.

Prerequisites: AAH 131, 259 and 260. Registration limited.

369. Digital Media and Culture II.

A continuation of Digital Media and Culture I. Students will be expected to spend time developing innovative and complex ideas and forms and advancing their vision(s) via digital media processes. This is a combination studio/seminar course and includes videos, readings and reflections, and written analyses. Prerequisites: AAH 131 and 269. *Also counts toward Digital Media and Film Major.*

### 389, 390. Special Projects in Art I and II.

Individual study for studio majors or especially qualified students. Prerequisite: consent of the supervising professor and department chair. Written proposals are required the semester before intended project. Hours to be arranged.

### 460. Senior Seminar in Visual Arts.

This course is required of all Art and Art History majors pursuing a concentration in studio art. This course is designed to provide a basis for continuing one's creativity in a professional and effective manner following graduation. Additionally, it is intended to give students a greater understanding of exhibition/gallery practices and to enlighten the student in the areas of independent art production: specifically the professional and personal challenges/rewards that lie therein. This course is comprised of readings, written assignments, studio work, and an exhibition. Offered every spring semester.

### 489, 490. SYE: Independent Study.

An independent study for senior studio majors that builds upon the student's prior work in studio art and is directed toward developing superior skills in research and studio work. A public presentation of the semester's work is required. Prerequisites: permission of the overseeing instructor and the department. Written proposals are required and are due the semester before intended project, one week prior to registration.

### 495, 496. Senior Project: Honors in Art and Art History.

Details of the program are available from the department chair. Honors Projects are yearlong projects that emphasize independent work and superior achievement. Students interested in pursuing an honors project should consult with their advisor and with the chair of the department early in their junior year to begin to formulate a proposal. A public exhibition of the year's work, as well as a defense of the work before departmental faculty, is required. Prerequisite: a minimum GPA of 3.5 in all courses in the major. Proposals must be submitted spring semester of the junior year, one week prior to registration. Permission of the department is needed.

## Asian Studies

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Combined major and minor offered.

Visit the Asian studies webpage at <https://www.stlawu.edu/offices/asian-studies>.

## Combined Major

Combined majors are offered in Asian studies with history, government and religious studies. These departments have agreed that their courses listed for Asian studies credit may also count for the departmental major.

In addition to fulfilling requirements for the disciplinary major, students must complete seven Asian studies courses distributed as follows:

1. At least one multi-regional course.
2. One semester-long course in an Asian language.
3. Five electives, including at least one course at the 300 or 400 level. No more than three of these courses can be selected from a single department or focus on a single region (East Asia/South Asia/Southeast Asia).

### **Asian Studies–Government**

Government majors pursuing a combined major in Asian studies must take a minimum of seven government courses distributed as follows:

1. Core Courses (3): Government majors must complete GOVT 103 Introduction to American Politics and GOVT 105 Introduction to Comparative Politics. Additionally, students must take either GOVT 108 Introduction to International Politics or GOVT 206 Political Theory. One of these three introductory courses must be designated writing-intensive and should be completed before the end of the sophomore year. These three introductory courses must be taken in residence on the St. Lawrence campus.
2. Research Seminar (1): During the sophomore or junior year, ideally after completion of the writing-intensive course, students must take one of the government Research Seminars (290, 291, 292, 293). Students may take only one research seminar.
3. Asian Politics Course (1): Majors will take either GOVT 322 Chinese Politics, GOVT 324 Asia: Beyond the Great Wall, or a special topics course on Asia within the government department.
4. Elective Courses (2): These may be upper division elective courses. Students may count up to one unit of internship coursework or one unit of independent study toward the elective requirements. No more than one of the elective courses may be taken off campus. Two of the five required Asian Studies electives must be outside the government department. One of the electives must include a research component.

### **Asian Studies–History**

History majors pursuing a combined major with Asian studies must fulfill the regular history major requirements, though they must take a minimum of nine history courses rather than the standard ten. The nine required history courses must include a research seminar and at least one course each in European history, North American history and Asian history.

Two of the five required Asian Studies electives must be outside the history department. One of the electives must include a research component.

### **Asian Studies–Religious Studies**

Religious studies majors pursuing a combined major with Asian studies must fulfill the regular religious studies major requirements, though they must take a minimum of nine courses rather than the standard ten.

Two of the five required Asian Studies electives must be outside the religious studies department. One of the electives must include a research component.

## Minor

For the minor, students must take six Asian studies courses as follows:

1. At least one multi-regional course.
2. One semester-long course in an Asian language.
3. Four electives, including at least one course at the 300 or 400 level. These courses must be selected from more than one department and must focus on more than one region (East Asia/South Asia/Southeast Asia).

Courses should be selected in consultation with the minor advisor. Electives must be courses taken at St. Lawrence University and/or full-credit courses offered in China, India, Japan or Thailand. Students must maintain a minimum GPA of 2.0 in courses submitted for the minor.

## Multi-Regional Courses

### Departmental Offerings

#### Anthropology

208. Ancient Civilizations.

#### Art and Art History

217. Buddhist Art and Ritual.

#### Economics

236. Globalization Issues.

#### Digital Media and Film

271. World Cinema.\*\*

#### Global Studies

225. Asian Political Economy in the Global Age.

#### Government

324. Asia: Beyond the Great Wall

#### History

125. Early Asian Civilizations. *Also offered as HIST 105.*

126. Modern Asia. *Also offered as HIST 106.*

#### Philosophy

103. Philosophy East and West: An Introduction.

223. Asian Philosophy.

#### Religious Studies

222. Buddhist Religious Traditions.

## Elective Courses

### Departmental Offerings

#### Anthropology

208. Ancient Civilizations.

#### Art and Art History

212. Icons of Islamic Architecture. (*South Asia*)

217. Buddhist Art and Ritual. (*East/South Asia*)

218. Arts of South Asia. (*South Asia*)

319. Gender Issues in Asian Art. (*South Asia*)

#### Biology

258. Ethnobotany. (*South/Southeast Asia*)

380. Tropical Ecology.\*\* (*South/Southeast Asia*)

#### Digital Media and Film

271. World Cinema.\*\*

#### Global Studies

225. Asian Political Economy in the Global Age.

#### Government

105. Comparative Politics.\*\* (*East Asia*)

291. Research Seminar: China's Rise. (*East Asia*)

322. Chinese Politics. (*East Asia*)

324. Asia: Beyond the Great Wall

#### History

106. Modern Asia.

282. Modern Japan. (*East Asia*)

292. Revolutionary China. (*East Asia*)

377. Colloquium in Asian History (*topics vary*)

475-476. SYE: Seminar in Asian History. (*East Asia*)

#### World Languages, Cultures, and Media

Chinese 101,102. Elementary Chinese.

Chinese 103, 104. Intermediate Chinese.

Chinese 201, 202, Advanced Chinese.

232. Cultures of China through Fiction and Film\* (*East Asia*) Also offered as DMF and HIST 232.

234. Chinese Literature and Film.\* (*East Asia*) Also offered as DMF 234.  
489, 490. SYE: Independent Study. (*East Asia*)

**Music**

210. Musics of the World.\*\*  
244. Musics of South Asia. (*South Asia*)

**Philosophy**

103. Philosophy East and West: An Introduction.  
223. Asian Philosophy.

**Religious Studies**

221. Religious Life of South Asia. Also offered as ASIA 261.  
222. Buddhist Religious Traditions.  
226. The Religious Life of Japan. (*East Asia*)  
227. The Religious Life of China. (*East Asia*)  
228. Fantasy Religion. (*East Asia*) Also offered as REL 218.  
282. Love and War in Hindu Myth: Ramayana. Also offered as ASIA 282 and GS 282.  
283. Love and War in Hindu Myth: Mahabharata. Also offered as ASIA 283 and GS 283.  
331. Pilgrimage as a Spiritual Journey.  
334. The Ways of the Gods: Shinto in Modern Japan. (*East Asia*)  
337. Postcolonial India: Film & Literature. Also offered as REL 337, DMF 337, and GS 337.  
450, 451. Directed Studies in Religion.\*\*

\*Literature in Translation courses

\*\*These courses receive Asian studies credit at the discretion of the instructor and the Asian studies program.

Special Topics courses with Asian content may be counted toward the minor and combined majors at the program coordinator's discretion.

## Off-Campus Study

Students majoring or minoring in Asian studies are strongly encouraged to study in Asia for a semester or more. They should consult early with the Coordinator of the Asian Studies program, coordinators of the individual study abroad programs, and with advisors at the Center for International and Intercultural Studies in Carnegie Hall. See the CIIS website for more information: <http://www.stlawu.edu/ciis/programs>.

# Biochemistry

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Major offered.

More information on this interdisciplinary major and important advice on planning for this major can be found at <https://www.stlawu.edu/offices/biochemistry>. Note that students majoring in biochemistry may not also major and/or minor in biology, neuroscience or chemistry.

## Advanced Placement Exams

Students scoring a 4 or 5 on the AP biology exam should enroll in the first semester of General –BIOL 101 for which they receive 1.25 units of credit toward the major and graduation. Students who do well in 101 may be permitted to bypass the second semester of General BIOL 102, receiving the 1.25 units of credit for this course as well as standing to take courses that require 102. Approval of this option to bypass the 102 courses is determined by the General Biology course instructors. Although AP scores of 4 or 5 automatically nominate students for this bypass option, students may voluntarily choose to stay in the General Biology course sequence and enroll in BIOL 102.

Students who have taken AP chemistry in high school and received a grade of 4 or 5 on the advanced test are eligible to receive one unit of college credit for CHEM 103. These students are eligible to enroll in CHEM 104 in the spring but may choose to enroll in CHEM 103 in the fall if they prefer.

## Major Requirements

Biochemistry majors must complete the following courses:

### Biology

- 101. and 102. General Biology.
- 245. Genetics.
- 250. Introduction to Cell Biology.

### Chemistry

- 103. and 104. General Chemistry.
- 221. and 222. Organic Chemistry.
- 342. Thermodynamics and Kinetics.

### Biochemistry

- 309. Biochemistry.
- 394. Research Methods in Biochemistry.
- 395. Research Methods in Molecular Biology.
- 415. Advanced Biochemistry.

A senior project following either chemistry **or** biology department guidelines.

## Physics

103,104. College Physics. *or*

151,152. University Physics.

## Mathematics

135. Calculus I.

136. Calculus II.

## Senior Research and Honors Project

Under the direction of a faculty mentor, students conduct their senior research or honors research project following either chemistry or biology department guidelines. To graduate with honors in biochemistry, students must have a biochemistry GPA (combined chemistry, biology and biochemistry required courses) of 3.5. Students working toward graduating with honors normally take BIOCH 489 in the fall semester and BIOCH 499 in the spring semester.

## Courses

309. Biochemistry.

The course is organized around several themes: the relationship of structure to function in biomolecules, production of energy, regulation and control of metabolism. Topics covered to illustrate these themes include enzyme action and regulation, hemoglobin and the transport of oxygen and carbon dioxide, metabolism of carbohydrates for energy production, structure and function of biological membranes, and structure and function of molecules involved in transmission and expression of genetic information. Prerequisite: CHEM 222 with a grade of 2.0 or higher or permission of instructor. Counts toward the neuroscience major (cellular track). *Also offered as BIOL 309 and CHEM 309.*

394. Research Methods in Biochemistry. (with lab) (1.25 units)

This course focuses on introducing basic laboratory techniques and skills that are common in fields related to biochemistry. Attention is paid to both theory and application. Students keep a detailed laboratory notebook and write up an extended project in the style of a journal article. Prerequisites: CHEM 222 and any one of BIOL 231, 245, 250, 391 or CHEM 309 (which can be taken as a co-requisite). Required for the biochemistry major and also carries credit toward the biology major/minor and the chemistry major/minor. *Also offered as BIOL 394 and CHEM 394.*

395. Research Methods in Molecular Biology. (with lab) (1.25 units)

Molecular techniques have revolutionized how biologists address problems in genetics, medicine, ecology, systematics, conservation and many other fields. Students obtain hands-on experience using basic and advanced molecular techniques, such as nucleic acid (DNA and RNA) isolation and purification, DNA sequencing, gel electrophoresis and polymerase chain reaction (PCR), to study gene expression and genetic variability. The molecular techniques studied are the same used in laboratories worldwide. In addition to gaining practical experience in the laboratory, students learn about the theories behind each

molecular protocol and study how biologists apply molecular techniques to answer fundamental biological questions. Prerequisites: BIOL 245, 250 or 394. Also offered as BIOL 395. Also required for biochemistry major and fulfills methods course requirement for the neuroscience major (cellular track). Offered each fall semester.

415. Advanced Biochemistry.

A variety of topics are covered in depth, depending on student interest. The course begins with an overview of metabolism, its hormonal regulation, and signaling pathways. Other topics may include protein synthesis and targeting, molecular immunology, sensory systems and neurotransmission, membrane transport, and photosynthesis. Through both written and oral presentation, students develop their abilities to use the scientific literature and communicate in science. Prerequisite: CHEM 309 or permission of instructor. Counts toward neuroscience major (cellular track). *Also offered as CHEM 415.*

468,469. SYE: Tutorial Research. (.5 or 1 unit)

Mentored study and research that is not experimental in design yet requires the analysis of primary literature-based data and the integration of this with current knowledge of the subject matter. A thorough understanding of the methodologies used in acquiring the published data is critical for this integration. This research will be presented according to either the biology or chemistry department guidelines. Prerequisite: sponsorship by a faculty member.

489, 490. SYE: Experimental Research. (.5 or 1 unit)

Research projects for students desiring to pursue directed, experimental research in biochemistry. Students integrate acquired research skills and subject knowledge to collect original experimental data and to analyze the results in reference to the existing scientific primary literature. Under the direction of a faculty mentor, students conduct their SYE research project following either chemistry or biology department guidelines. Prerequisite: sponsorship by a faculty member.

499. Honors Projects. (.5 or 1 unit)

Graduation with honors in biochemistry requires exceptional academic accomplishment as demonstrated by a biochemistry (combined biology, chemistry and biochemistry) GPA of 3.5 or above and the completion of a second semester of SYE honors research. Under the direction of a faculty mentor, students conduct their SYE honors research project following either chemistry or biology department guidelines. Prerequisite: sponsorship by a faculty member.

## Biology

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Majors and minor offered.

*see also* Biochemistry (administered jointly with chemistry), Biology–Physics (administered jointly with physics), Biomedical Sciences, Conservation Biology, and Neuroscience (administered jointly with psychology). A combined major is offered with Environmental Studies. Note that Biology majors cannot double major in Biochemistry, Biomedical Sciences, Neuroscience, or Conservation Biology.

Visit the biology department web page at <https://www.stlawu.edu/offices/biology>.

### Courses for the Non-Major

BIOL 101, 102 and 121 are open to all students and fulfill the natural science with lab distribution. BIOL 101 and 121 fulfill the environmental literacy distribution requirement. BIOL 101 and 102 also serve as the year of general biology required by many professional schools.

### Advanced Placement Exams

Students scoring a 4 or 5 on the AP biology exam or a 5, 6 or 7 on the IB exam should enroll in the first semester of General Biology (BIOL 101) for 1.25 units of credit toward the major and graduation. Students who do well in 101 may be permitted to bypass the second semester of General Biology course (BIOL 102), receiving the 1.25 units of credit for this course as well as the right to take courses that require BIOL 102. Approval of this option to bypass the BIOL 102 course is determined by the General Biology course instructors. Although AP or IB scores noted above automatically nominate students for this bypass option, students may voluntarily choose to stay in the General Biology course-sequence and enroll in BIOL 102.

### Major Requirements

Students entering St. Lawrence with an interest in biology should enroll in General Biology (BIOL 101 and 102) during their first year. They should also seek early advisement by a biology faculty member. Biology majors must complete a set of required and elective courses (outlined below). Continuation in upper-level biology electives courses requires a grade of 2.0 or higher in BIOL 101 and 102.

#### Required Courses

Full course descriptions can be found by visiting the *Catalog* section for the sponsoring department.

#### Specific Courses

Students must take all of the following courses:

- BIOL 101 and 102. General Biology.
- CHEM 103 and 104. General Chemistry.
- STAT 113 Applied Statistics or the following two MATH courses: 135. Calculus I. **and** 136. Calculus II.
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## Electives

Students take a minimum of six additional units of biology coursework, of which 2 must be at the 300 or 400 level. Students are encouraged to select two electives from each of the following three areas: Cell and Molecular Biology, Organismal Biology, and Ecology and Evolutionary Biology.

### Cell and Molecular Biology

- 231. Microbiology. *(with lab)*
- 245. Genetics.
- 250. Introduction to Cell Biology.
- 252. Research Methods in Cell Biology. *(with lab)*
- 288. Introduction to Neuroscience. *(with lab)*
- 309. Biochemistry.
- 333. Immunology. *(with lab)*
- 350. Cancer Biology. *(with lab)*
- 387. Cellular Mechanisms of Memory.
- 388. Drugs and the Brain. *(with lab)*
- 389. Advanced Neuroscience.
- 391. Scanning Electron Microscopy. *(with lab)*
- 392. Research Methods in Fluorescence and Confocal Microscopy. *(with lab)*
- 394. Research Methods in Biochemistry. *(with lab)*
- 395. Research Methods in Molecular Biology. *(with lab)*
- 415. Advanced Biochemistry.

### Organismal Biology

- 209. Vertebrate Natural History. *(with lab)*
- 215. Arthropods and Other Invertebrates. *(with lab)*
- 218. Ornithology. *(with lab)*
- 224. Biology of Plants. *(with lab)*
- 226. Comparative Animal Physiology *(with lab)*
- 227. Mammalogy. *(with lab)*
- 231. Microbiology *(with lab)*
- 230. Food from the Sea *(with lab)*
- 232. Laboratory Animals. *(with lab)*
- 258. Ethnobotany. *(with lab)*
- 315. Human Nutrition.
- 325. Mycology. *(with lab)*

- 341. Anatomy and Physiology I. (*with lab*)
- 351. Anatomy and Physiology II. (*with lab*)
- 353. Human Embryology.
- 370. Hormones, Disease and Development.

### **Ecology and Evolutionary Biology**

- 215. Fundamentals of Animal Biodiversity. (*with lab*)
- 218. Ornithology. (*with lab*)
- 221. General Ecology. (*with lab*)
- 227. Mammalogy. (*with lab*)
- 258. Ethnobotany. (*with lab*)
- 260. Once and Future Oceans
- 319. Plant Systematics. (*with lab*)
- 330. Ecology of Lakes and Rivers. (*with lab*)
- 335. Winter Ecology. (*with lab*)
- 343. Evolution. (*with lab*)
- 360. Marine Ecology.
- 380. Tropical Ecology.
- 440. Conservation Biology. (*with lab*)

### **Laboratory Requirement**

Students must complete the laboratory requirement in one of the following ways: 1) five units of course work with a laboratory component; 2) 3.75 units of course work with a laboratory component and a one unit of a lab or field-based SYE; **or** 3) 2.5 units of course work with a laboratory component and 1.25 units of a research methods course with lecture and laboratory.

## **Independent Research and the Senior Year Experience**

Students who wish to conduct independent research before their senior year may do so by taking customized research methods courses (BIOL 381 and 382), or as seniors, by taking BIOL 468 and/or 469 (SYE: Tutorial Research) and BIOL 489 and/or 490 (SYE: Experimental Research). Students must discuss possible projects with members of the biology faculty. For more detail, see <https://www.stlawu.edu/offices/biology>.

## **Honors in Biology**

To graduate with honors in biology normally requires 1 unit of independent research and 1 unit of honors -research in different semesters, a 3.5 major GPA, submitting a signed honors nomination form, a thesis, a public presentation, and approval of the honors project committee. A student wishing to be considered for honors in biology should enroll in SYE research (BIOL 489, or 490) during the first

semester of research (usually, but not limited to, the fall semester of the senior year) for 1 unit of credit. The student, in consultation with the project advisor, should choose an honors project committee comprised of the project advisor and two other faculty members appropriate to the topic (one of these two may be from another department). This honors committee should be formed as soon as possible in the first semester of research.

At the end of the first semester, the honors project advisor, in consultation with the other members of the honors committee, evaluates a formal research proposal and progress toward the completion of the project. If the project is deemed worthy of honors in biology, the student is nominated as a candidate for honors and submits the honors nomination form to one of the department co-chairs. The student can then enroll in BIOL 499 (SYE: Honors Research) for the second (usually spring) semester for 1 unit of credit. However, only one unit can count toward the minimum requirements of the major.

## Honors in the Environmental Science–Biology Combined Major

To graduate with honors in the environmental science–biology combined major, students must maintain a GPA of 3.5 or higher in biology and environmental studies courses and complete an honors research project having an environmental component or emphasis. The timetable and guidelines are the same as for honors in biology, except that the project must be guided by a project committee comprised of at least one faculty member from *both* environmental studies and biology. Also, the student is nominated for honors by both the environmental studies and biology faculty.

## Minor Requirements

The minimum course requirements for a minor in biology are the two semesters of General Biology (BIOL 101 and BIOL 102) plus 3.5 additional units of biology courses above the 100 level. At least one of the additional units must be at the 300 level and two of the additional units must have a laboratory component. Independent research courses (BIOL 368, 369, 381, 382, 468, 469, 489, and 490) cannot be used for the biology minor. The department does not require specific courses but does strongly recommend that minors select courses that provide breadth. Advanced placement for the minor is the same as for the major.

## Courses

### 101. General Biology I. (with lab) (1.25 units)

Discover ecology, evolution, biological diversity, and conservation biology using an investigative and problem-based approach. Students design, conduct, and present their own in-depth independent research project based on structured, skill-based lab exercises and scientific literature. One three-hour lab, a one-hour peer study session and three lectures each week. Acceptance into upper-level biology courses (200+ level) requires a grade of 2.0 or higher in 101. Offered every year in the fall semester. Required for biology, biochemistry, biology-physics, biomedical sciences, conservation biology, environmental studies-biology, and neuroscience majors.

102. General Biology II. (with lab) (1.25 units)

Investigate cell biology, genetics, and physiology using a problem-based approach. Students design, conduct, and present their own in-depth independent research project using structured, skill-based lab exercises and scientific literature. One three-hour lab, a one-hour peer study session and three lectures each week. Offered in the spring semester. Acceptance into other biology courses requires a grade of 2.0 or higher in 102. Offered each spring semester. Required for biology, biochemistry, biology-physics, biomedical sciences, conservation biology, environmental studies-biology, and neuroscience majors.

121. The Natural World. (with lab) (1.25 units)

A biology-ecology course with laboratory for non-majors focusing on ecological processes and challenges facing individual organisms, populations, communities and ecosystems. Students visit a variety of local habitats to study ecosystems and to learn the natural history and identification of Northeast trees and animals. Students will observe birds, follow animal tracks, take nature photos, conduct a foraging experiment and discuss climate change. This lecture and outdoor lab course does not count toward the biology major but does count toward the outdoor studies minor. Fulfills the natural science with lab and environmental literacy distribution. Offered each spring semester. *Also cross-listed with Outdoor Studies.*

209. Vertebrate Natural History. (with lab) (1.25 units)

A field-oriented course that explores the biology of vertebrate animals, with emphasis on understanding the diversity, life history, evolution and unique adaptations of vertebrates. The laboratory focus is on developing scientifically sound skills in observation and on learning to identify local vertebrates. Some extra class meetings are required for regional field excursions and for observing and identifying local vertebrates at the times of day when they are active. Offered alternate fall semesters. Prerequisite: BIOL 101,102. *Also offered as ENVS 209 and through Outdoor Studies.* Also counts as a biodiversity course for the conservation biology major.

215. Arthropods and Other Invertebrates. (with lab) (1.25 units)

Many people want to explore the galaxy, seeking alien life but Earth already hosts a bountiful supply and it's all around us! Lobster, shrimp, insects, spiders and other Arthropods are everywhere and are incredibly important in our lives (food, agriculture, fisheries, biomedical research, etc.). So are other invertebrate animals like squid, octopus, sponges, corals, jellyfish, clams, worms, snails, and seastars and many have weird, fascinating anatomies, behaviors, and ecological roles. Want to discover them and understand the bulk of all animal life on the planet? This course is ideal for sophomores and juniors who are looking to broaden their understanding of biodiversity, environmental science, and biomedical applications. Lectures and one laboratory per week. Prerequisites: BIOL 101, 102 or equivalent. This elective course provides credit for the Biology, Conservation Biology, and Biology-Environmental Studies majors.

218. Ornithology. (with lab) (1.25 units)

This course provides students with a basic understanding of avian biology. We learn about the diversity of birds through an exploration of avian evolution, physiology, taxonomy and ecology. Students are

expected to become proficient in field identification of Northern New York birds by sight and sound, as well as their natural history. Lectures and lab. Labs are generally outdoors, and some Tuesday morning classes after Spring Break will meet early (approximately 6:30 a.m.) for field trips. One mandatory full-day weekend field trip at the end of the semester. Recommended course: BIOL 221. Also counts as a biodiversity course for the conservation biology major.

221. General Ecology. (with lab) (1.25 units)

A study of the factors influencing the abundance and distribution of species, including interactions between individuals and their physical/chemical environment, population dynamics and the structure/function of communities and ecosystems and their responses to disturbance. Labs are field-oriented and emphasize characteristics of local communities or specific techniques such as estimation of population density. Lectures and one lab per week. Prerequisites: BIOL 101, 102 or equivalent, or permission of instructor. Offered each semester. *Also offered as ENVS 221 and through Outdoor Studies.*

224. Biology of Plants. (with lab) (1.25 units)

A study of the evolution, morphology, physiology and life histories of mosses, ferns, conifers, flowering plants and their relatives, in an ecological context. Indoor labs survey the morphology and reproductive characters of the major groups of plants as well as the structure and function of plant organs and tissues. Outdoor labs emphasize ecology, identification and economic uses of local plants. Lectures and one laboratory per week. Prerequisites: BIOL 101,102 or equivalent or permission of instructor. Also counts as a biodiversity course for the conservation biology major.

227. Mammalogy. (with lab) (1.25 units)

The objectives of the course are to become familiar with the diversity of mammalian species as well as their distribution, morphology, taxonomy and ecology. A special emphasis is placed on learning to identify mammals of New York State in the field and from specimens. Lab focuses on learning modern methods for studying mammals in the field. This course includes a unit on Marine Mammals through a camping trip on Cape Cod which requires students to miss their on campus classes, sports practices or games for four days early in the semester. Prerequisites: BIOL 101, 102 or equivalent. Offered alternate fall semesters. *Also offered through Outdoor Studies.* Also counts as a biodiversity course for the conservation biology major.

230. Food from the Sea. (with lab) (1.25 units)

Throughout history human populations and cultures have been shaped by their use of finfish and shellfish from the marine biome. What species have been exploited, in what ways, how has this changed over time, and can these marine resources be used in a sustainable way to feed the growing global population of humans? This course will explore these larger questions as it uncovers (a) the biodiversity and ecology of marine fishery organisms (whales, fish, squid, clams, etc.), (b) the impacts of human predation on these organisms, (c) efforts to aquaculture and conserve certain seafood species, and (d) human health issues related to seafoods. This course will be based largely on discussions of class readings (there is a moderate to high reading load) and projects that explore sustainable uses of marine and even freshwater species. This class is ideal for sophomore and junior Biology, Biology–

Environmental Studies, and Conservation Biology majors. Prerequisites: BIOL 101 and 102. Offered each spring. Also counts as a conservation science course for the conservation biology major.

231. Microbiology. (with lab) (1.25 units)

An introduction to the structure, physiology, ecology, genetics and evolution of microscopic organisms including bacteria, archaea and protists. Students examine the metabolic activities and adaptations of these organisms and their interactions with the environment. The ecological, medical and industrial importance of microbes and microbial communities is explored. The laboratory involves microbial cultivation, isolation and identification as well as analysis of microbial presence and activity. Laboratory skills acquired in this course are applicable to a variety of fields including genetics, environmental studies, health and industry. Lectures and one laboratory per week. Prerequisites: BIOL 101,102; pre- or co-requisite: CHEM 103 or permission of instructor. Also counts as a biodiversity course for the conservation biology major.

232. Laboratory Animals: Ethics, Care and Techniques. (with lab) (.5 unit)

An introduction to the techniques, use and care of laboratory animals. Students gain knowledge and hands-on experience in anesthetics/analgesics, surgical techniques, and proper animal handling and husbandry. The ethical use of animals in research, appropriate and humane care, and the functions of regulatory agencies are covered. Concurrently, students explore the relationships between humans and animals used in teaching and research. Prerequisite: PYSCH 100 or 101 or BIOL 101 or permission of instructor.

235. Foundations of Medicine I (0.5 unit)

This course is designed to help students as they prepare to take the MCAT and apply to medical school. The major goal of the course is to facilitate MCAT preparation. Outside of class students will work on their MCAT content review including concept checks and practice questions and take two full-length practice exams. During class students will learn and practice test-taking strategies. In the interest of developing other aspects of students' medical school applications, students will read and respond to a book that relates to current medical culture, the complexity of changing medical systems, or how to make a lasting difference in developing countries. Students will also engage in reflective journal exercises about medical school competencies to encourage development of activities that will help their application. In addition, one class period will be a panel discussion where community physicians discuss and answer questions about their paths into medicine and current practices. Offered each fall. This course **does not** count towards Biology Major credit. This course **cannot** be taken pass/fail.

245. Genetics.

An introduction to the principles of the transmission of inherited characteristics and the underlying molecular mechanisms of the regulation of expression of genetic information. Genetic engineering and an introduction to population genetics are included. Three lectures per week. Prerequisite: BIOL 101, 102 or equivalent; pre- or co-requisite: CHEM 101 or 103 or permission of instructor. Also required for the biochemistry major, fulfills the genetics/evolution requirement of the conservation biology major, and counts as an elective for the neuroscience (cellular track) majors. Offered each semester.

250. Introduction to Cell Biology.

An understanding of the concepts and processes of cell biology is fundamental to all other disciplines in biology. This course introduces the anatomy of the cell and physiology of its components, particularly in relation to the physiology of the entire organism. Cellular processes of information storage/transfer (i.e., replication, transcription and translation of genetic material), metabolism, intracellular protein trafficking, and signaling transduction are also explored. Prerequisites: BIOL 101 and 102. Recommended: CHEM 103,104. Also required for biochemistry major. Offered each semester.

252. Research Methods in Cell Biology. (with lab)

In this course, students will obtain hands-on experience using basic and advanced techniques in cell biology, such as solution preparation, cell culture, transfection, protein extraction and concentration measurement, polyacrylamide gel electrophoresis (PAGE), western blotting, basic staining and imaging of cells and confocal microscopy. The techniques studied in this course are the same techniques that are used in laboratories across the country and around the world. In addition to gaining practical experience in the laboratory, students will learn about the theories behind each technique and study how biologists apply these techniques to answer fundamental biological questions in cell biology. Prerequisites: BIOL 101 and 102. Counts as a 1 unit research methods course for the biology major and fulfills the methods course requirement for the neuroscience major (cellular track).

258. Ethnobotany. (with lab) (1.25 units)

Ethnobotany is an interdisciplinary field drawing on concepts from both natural and social sciences to investigate human-plant interactions. This course illustrates the importance of plants in our everyday lives and the influence of human activities on plant populations. Independent projects center around surveys and experiments on socioeconomically important plants. Field trips and labs explore global and local traditional medicinal plant species and other plants of socioeconomic importance. Three hours of lecture and one three-hour laboratory per week. Cross listed with Anthropology, Asian Studies, Environmental Studies, Global Studies, and Public Health. Also counts as a biodiversity course for the conservation biology major. Prerequisite: BIOL 101

260. Once and Future Oceans

Our vast global oceans are changing, modifying most of Earth's biodiversity, its ecological functions, its food supply, and its carrying capacity for humans. What habitat alterations are happening in this vast biome and how are creatures like tuna, seaweeds, corals, octopus, sea otters, oysters, and jellyfish adjusting to their new normal in this mysterious, largely unseen part of our world? Can humans safeguard this largely blue planet? This course is ideal for sophomores and juniors who are looking to broaden their understanding of biodiversity, environmental science, and sustainability. Prerequisites: BIOL 101, 102 or equivalent. This elective course provides credit for the Biology, Conservation Biology, and Environmental Studies-Biology majors.

288. Introduction to Neuroscience. (with lab) (1.25 units)

This course provides basic understanding of the architecture and processing of information in the brain. Particular emphasis is placed on the cellular properties of cells in the nervous system and how these

biophysical properties affect information processing. To this end, students learn neuroanatomy and use computer models to gain insight into the computational power of the brain. Other topics include development of the nervous system, neurophysiology of sensation and homeostatic control mechanisms. Three hours of lecture and three hours of laboratory per week. Offered each fall semester. Prerequisites: BIOL 101 and 102. Recommended: BIOL 245, or 250. *Also offered as NRSCI 288.* Also required for the neuroscience major.

### 303. Biostatistics: Dealing w/ Data

A fundamental aspect of practicing biology-related science (be it through the lens of ecology, medicine, public health, etc.) is dealing with data. Data analysis requires much more than picking the correct statistical test. Data sets are being generated at an exponential rate and the potential for combining public data sets to ask new scientific questions is immense. In this course, we will learn to use the free, open-source software program R (the industry standard) for cleaning, organizing, and analyzing biological data sets (including data visualization). We will also learn to create reproducible data analysis workflows. In the later part of the semester, students will analyze a data set from an area of biology in which they have particular interest. This course counts as an Advanced Ecology class for the Conservation Biology major and as an elective for a Data Science major or Statistics minor. Prerequisites are Biology 101, Biology 102 and at least one Biology class at the 200 or above level. Students from outside of Biology who lack the prerequisites may petition the instructor for admission to the course. Fulfills the QLR requirement (2013 curriculum)

### 304. Health Coaches I with CBL (0.5 unit)

The fall semester of Health Coaches is focused on understanding the role of different members of the health care team, gaining perspective on the nature of chronic disease, and learning skills including motivational interviewing. This course includes an experiential learning component known as Community Based Learning (CBL). The CBL component will require students to participate in a community placement, outside of class time, on a weekly basis throughout the semester; on average students can expect to spend up to at least two hours per week in the community. This will allow students the opportunity to practice the skills being discussed in class. Multiple physicians and health care administrators will speak to students about a variety of topics including the role of the health coach, population health, empathy, end of life care, cardiovascular screening, diabetes mellitus, motivating patients, and the changing face of medicine. Offered each fall. This course **does not** count towards Biology Major credit. This course **cannot** be taken pass/fail.

### 305. Health Coaches II with CBL (0.5 unit)

During the spring semester of Health Coaches, students are assigned a chronically ill individual with whom to visit, call, and assist with setting and achieving health goals. After the initial patient visit and introduction, students spend 1-2 hours a week alone with their patient, talking about and implementing changes that will benefit their health. Many class periods are dedicated to clinical conferences, where students present their patients' health challenges and current goals. Canton Potsdam Hospital staff will be present to share ideas that have worked with previous patients and offer support. Offered each spring. This course **does not** count towards Biology Major credit. This course **cannot** be taken pass/fail. The course in combination with Health Coaches I meets the experiential learning component for the Biomedical Sciences and/or Public Health majors.

### 309. Biochemistry.

The course is organized around several themes: the relationship of structure to function in biomolecules, production of energy, regulation and control of metabolism. Topics covered to illustrate these themes include enzyme action and regulation, hemoglobin and the transport of oxygen and carbon dioxide, metabolism of carbohydrates for energy production, structure and function of biological membranes, and structure and function of molecules involved in transmission and expression of genetic information. Prerequisite: CHEM 222 or permission of instructor. Required for the BIOCH major and also counts as an elective for the neuroscience (cellular) major. *Also offered as BIOCH 309 and BIOCH 309.* Offered each semester.

### 311. Foundations of Medicine II (0.5 unit)

This course is designed to help students as they prepare to take the MCAT and apply to medical school. One major goal of the course is to thoughtfully prepare the personal statement and other documents necessary to successfully apply to medical school. Class time will be spent reflecting on personal characteristics and experiences and how to best arrange these on the AMCAS and AACOMAS applications to tell the story of why you'll make a great physician. In addition, we will spend time workshopping personal statements and experience descriptions. The second major goal of the course is to prepare for the different ways medical schools evaluate interpersonal and intrapersonal skills through AAMC PREview (Professional Readiness Exam formerly SJT), CASPer and interviews. Students will work on a research project that addresses a potential CASPer prompt and present it. We will complete and discuss practice AAMC PREview questions in class, and students will have multiple opportunities to practice interview questions and receive feedback. The third major goal is to facilitate MCAT preparation. Outside of class students will complete their MCAT content review including concept checks and practice questions and take two full-length practice exams. During class students will practice test-taking strategies with iClicker questions. The last and final goal is to emphasize that you cannot be helpful to someone without first understanding their perspective and wishes. Offered each spring. This course **cannot** be taken pass/fail and **does not** count towards Biology major credit.

### 315. Human Nutrition.

Food is a basic requirement of human life, impacting biological events at the level of the organism down to the level of the cell. In this course, we will focus on the major energy yielding macromolecules of carbohydrates, lipids, and proteins and how their intake must be balanced to maintain healthy body weight. Other micronutrients including vitamins and minerals will be studied from the perspective of their role in specific body systems. Throughout the course, we will apply this science-based knowledge to assessments of popular diet plans, supplement use, and health claims made about so-called "super foods." Students will also perform both self-analysis of 3-day food records and analysis of patient laboratory results with 24-hour food recall information. Prerequisites: BIOL 101 and 102. Offered every spring semester.

### 319. Plant Systematics.

Classical and modern approaches to the taxonomy of higher plants with emphasis on evolutionary trends, principles of classification and geographic distribution. The distinguishing field characteristics of the principal families of ferns, conifers, and flowering plants are studied. Also included is the

identification of local flora. Prerequisites: BIOL 101 and 102. Offered in alternate years. Also counts as a biodiversity course for the conservation biology major.

330. Ecology of Lakes and Rivers. (with lab) (1.25 units)

The biology of freshwater organisms from a community and ecosystem perspective. Topics include food web dynamics, fisheries science, primary production, seasonal succession, and nutrient cycling. Emphasis is on interactions among fish, invertebrate and plant communities, as well as the influence of their physical, chemical, and geological settings. Class projects investigate local and regional lakes and rivers; thus, there is a substantial amount of field/lab work. There is also emphasis on the characterization of watersheds using GIS. This course will include discussions of class readings (there is moderate to high reading load). This class is ideal for junior and senior Biology, Biology–Environmental Studies, and Conservation Biology majors. Prerequisite is BIOL 221. Offered each fall semester. Also fulfills the advanced ecology requirement of the conservation biology major.

333. Immunology. (with lab) (1.25 units)

The immune system boasts powerful mechanisms that protect the body from invading pathogens. We explore the development and function of a diverse repertoire of T and B lymphocytes, the range of powerful antibody-mediated responses, and the pre-programmed responses of phagocytic cells and natural killer cells. These basic concepts are then integrated to analyze the immune system's function in disease states including cancer, organ transplant, autoimmunity, infectious disease and immunodeficiency. Laboratory activities highlight immune-based techniques fundamental to research in immunology as well as other biological fields. Prerequisites: BIOL 101 and 102 or equivalent. Also counts as an elective for the neuroscience (cellular tracks) major.

341. Anatomy and Physiology I. (with lab) (1.25 units)

This course is devoted to the principles and science of anatomy and physiology. Students will learn respiratory, muscular, cardiovascular, skeletal, and gastrointestinal human physiology in lectures. The labs will concentrate on the relationship between anatomical form and function, human physiology, and medical problem solving as an application of anatomy and physiology. The lab portion of the course is intended to challenge students to find anatomical landmarks on a variety of specimens; to increase understanding of respiratory, cardiovascular and muscle physiology; and to think critically about how altered anatomy or physiology results in disease. Prerequisites: Biology 101, 102 or equivalent. Offered each fall. Also counts as an elective for the neuroscience (cellular track) majors.

343. Evolution. (with lab) (1.25 units)

In this course we examine life on earth from a historical perspective and evaluate the fundamental evolutionary processes that have produced the diversity of life that we see today. Study topics include the origin of life on earth, mutation as the creator of genetic variation, natural selection, adaptation, population genetics, speciation and extinction. Laboratory projects are designed to develop technical skills in molecular biology and phylogenetic analysis. Three hours of lecture and three hours of laboratory per week. Prerequisites: BIOL 101 and 102. Recommended: BIOL 245. Also fulfills the genetics/evolution requirement for the conservation biology major.

### 350. Cancer Biology.

Cancer remains one of the most fascinating and yet devastating diseases afflicting humankind. In this course, we will explore the unique molecular and cellular abnormalities that transform healthy cells into dysregulated, rapidly proliferating cancer cells. Genetic and environmental causes of cancer will be identified from an epidemiological perspective and further described at the molecular level. Students will read relevant primary research articles throughout the course and will work in pairs to present a current study to the class. Pre-requisites: BIOL 101 **and** 102 **and** one of these: BIOL 245 or 250. Offered every spring semester.

### 351. Anatomy and Physiology II. (with lab) (1.25 units)

This course is devoted to the general principles and concepts of anatomy and physiology. Lecture topics include functioning of the nervous, hepatic, reproductive, excretory and endocrine systems. The lab is dedicated to the study of human anatomy and physiology and the relationship between anatomical form and function. Lab activities include dissection, an introduction to microscopic anatomy/histology, physiology experiments and disease focused problem solving sessions. The course is intended to increase the appreciation of the vast complexity of vertebrate anatomy and physiology and one's own biology. Prerequisites: BIOL 101 and 102. Offered each spring semester; two lab sections. Also counts as an elective for the neuroscience (cellular track) majors.

### 353. Human Embryology.

In this course, we examine the fundamental processes and principles that govern the development of humans from fertilization to birth. Developmental processes are considered at the molecular, cellular and anatomical levels. An emphasis is placed on understanding how the human body is constructed, including the development of organs and organ systems. We will also examine abnormal development and human birth defects. Required BIOL 101 and 102. Also counts as an elective for the neuroscience (cellular tracks) major.

### 370. Hormones, Disease and Development.

This course is designed to teach the basic principles of both general (i.e. human and medical) and comparative (other types of vertebrates and invertebrates) endocrinology, stressing the diverse ways in which different types of animals have evolved to adapt physiologically to their environments. Students will become familiar with key endocrine systems, including the hypothalamic-pituitary axis, the stress response, reproduction, salt/water balance, and many others and will gain knowledge of how environmental endocrine disruptors are influencing development, growth, and reproduction of wildlife and humans. Quantitative thinking skills and productive intellectual interactions will be developed by reading and analyzing studies from the primary literature. Prerequisites: BIOL 101 and 102.

### 380. Tropical Ecology.

A seminar course based on current research in tropical biology. Emphasis is on the structure, function and biology of tropical organisms and ecosystems, especially as compared to temperate systems. Lectures include South American, Australasian and African tropical ecosystems. The course addresses the role of plant-animal interactions, mutualisms, sustainable development, conservation measures and

the roles of indigenous cultures in tropical ecosystems. Prerequisite: BIOL 101 and 102. *Also offered as ENVS 380.* Also fulfills the advanced ecology requirement of the conservation biology major.

381, 382. Research Methods Training. (0.5 or 1 unit)

Special courses intended to offer non-senior research training specific to a faculty member's research program. Many techniques covered are not generally taught within the lab of a regular course offering. The course will be indicated on the student transcript as "Research Methods in X" with "X" being the research area (e.g., endocrinology). These offerings are by permission only in consultation with the appropriate faculty mentor. Such courses do not count as one of the minimum 6.75 units for the major.

387. Cellular Mechanisms of Memory.

This course examines the molecular mechanisms of neuronal plasticity. Topics include an analysis of the cellular processes that have been proposed to be at the core of memory formation, with discussion of the electrophysiological methods that have been used to analyze these processes; the biochemical mechanisms for short-term and long-term information storage at the cellular level and the vertebrate and invertebrate experimental models used for studying the molecules involved in memory formation. Prerequisites BIOL/NRSCI 288. Counts toward the neuroscience major (cellular track). Offered on alternate fall semesters. *Also offered as NRSCI 387.*

388. Drugs and the Brain. (with lab) (1.25 units)

This course will focus on how psychoactive drugs modify nervous system function and human behavior. The neurochemical and behavioral techniques used to study drug action will be addressed. Students will learn how drugs are metabolized by the body (pharmacokinetics), act (pharmacodynamics) and affect behavior (psychopharmacology), gaining comprehensive understanding of the neurotransmitter systems of the brain and how different drugs affect these systems. The laboratory component will utilize the nematode *C. elegans* as a model system to explore drug action; students will learn research techniques and carry out independent research. Three hours of lecture and three hours of laboratory per week. Prerequisites: BIOL/NRSCI 288. Counts toward the neuroscience major (both tracks). Offered every spring semester. *Also offered as NRSCI 388.*

389. Advanced Neuroscience.

Builds on the fundamental concepts presented in BIOL/NRSCI 288 (Introduction to Neuroscience) and begins to examine neurobiology from a systems perspective. Topics include the biological basis of sexual orientation, sleep and dreaming, sleep disorders, epilepsy and seizures, motivation and addiction, Alzheimer's disease, disorders of thought and volition, and mood disorders. Prerequisite: BIOL/NRSCI 288. Required for the neuroscience major. Offered every spring semester. *Also offered as NRSCI 389.*

391. Research Methods in Scanning Electron Microscopy. (with lab) (.5 unit)

This course deals with the theoretical and practical aspects of scanning electron microscopy (SEM) and elemental analysis using EDS. Specifically, we will be using a brand new state of the art Quanta 450 SEM

with Oxford EDS detector. Mastery of the course topics will require 6 hours of lab/class as well as 3-6 hours of independent work per week for 7 weeks. Those who master these skills will be welcome to use the instruments to conduct independent (senior or mentor guided) research. The initial classes will have greater emphasis on theory, and as we progress, we will spend more time on the scope. All students will be trained how to properly use this instrument. Students are expected to spend time outside class working on specimen prep, imaging, and image processing. This will culminate in a final portfolio of images. *Also offered as GEOL 391.* Prerequisite: at least one 200- or 300-level science course.

392. Research Methods in Fluorescence and Confocal Microscopy. (with lab) (1.25 units)

Fluorescence microscopy allows a biological specimen to be fluorescently labeled and imaged. This technique is employed in many research labs and is a standard tool to locate the presence of a particular protein or cell structure. This technique, however, has limitations and is not precise in its ability to discern the specific depth of structures. Confocal microscopy was developed to address the issue of specificity of position. Precise imaging has led to confocal becoming a major tool in biological research. Students in this course will learn the theory and practice of both fluorescence and confocal microscopy. Students will be assigned a variety of specimens to be stained. These specimens are selected specifically to teach new techniques in specimen prep or imaging. Students will learn lab and laser safety, light and fluorescence, optics, the upright fluorescence microscope, the inverted confocal microscope, photomultiplier tubes, resolution and numerical aperture, specimen preparation, basic immunology, and image acquisition, processing, and presentation. Semester will culminate with individual portfolios of selected images. Prerequisites: any 200- or 300-level science course. Also fulfills methods course requirement for the neuroscience major (cellular track). Offered each semester.

394. Research Methods in Biochemistry. (with lab) (1.25 units)

This course focuses on introducing basic laboratory techniques and skills that are common in fields related to biochemistry. Attention is paid to both theory and application. Students keep a detailed laboratory notebook, and write up an extended project in the style of a journal article. Prerequisites: CHEM 222 and any one of BIOL 231, 245, 250, 391 or CHEM 309 (which can be taken as a co-requisite). Also required for the biochemistry major. *Also offered as BIOCH 394.* Offered each spring semester.

395. Research Methods in Molecular Biology. (with lab) (1.25 units)

Molecular techniques have revolutionized how biologists address problems in genetics, medicine, ecology, systematics, conservation and many other fields. Students obtain hands-on experience using basic and advanced molecular techniques, such as nucleic acid (DNA and RNA) isolation and purification, DNA sequencing, gel electrophoresis and polymerase chain reaction (PCR), to study gene expression and genetic variability. The molecular techniques studied are the same used in laboratories worldwide. In addition to gaining practical experience in the laboratory, students learn about the theories behind each molecular protocol and study how biologists apply molecular techniques to answer fundamental biological questions. Prerequisites: BIOL 245, 250 or 394. *Also offered as BIOCH 395.* Also required for biochemistry major and fulfills methods course requirement for the neuroscience major (cellular track). Offered each fall semester.

399. Current Topics in Neuroscience.

This seminar course will cover a wide variety of topics related to current neuroscience research. Our main source of information will be neuroscience primary literature articles available in the public domain. Students enrolled in the course will decide on the topics that will be addressed throughout the semester, will read the primary literature and will lead critical and comprehensive discussions on each research topic. Examples of topics that can be covered in this course include: epigenetics; mirror neurons; autism spectrum disorders; neurobiology of mental disorders; learning and memory; drug abuse and addiction; and the aging brain. Prerequisites: BIOL/NRSCI 288. Counts toward the neuroscience major (both tracks). Offered on alternate fall semesters. *Also offered as NRSCI 399.*

412. Cross-Cultural Perspectives of Healing.

This class uses healing traditions as the lens with which to examine culture. During the semester students will have the opportunity to meet healers from around the world. In a typical semester presenters include a Traditional Chinese Medical practitioner, an Ayurvedic physician (from India), a shaman from Peru, an exorcist, a native American Healer an allopathic physician, new age healers, a Christian Scientist and others. This course cannot be used to fulfill the requirements for the biology major. *Also offered as REL 412 and GS 412.*

415. Advanced Biochemistry.

A variety of topics are covered in depth depending on the interests of the students. The course begins with an overview of metabolism and its hormonal regulation. Other topics may include protein synthesis and targeting, molecular immunology, sensory systems and neurotransmission, hormone action, membrane transport, oncogenes and cancer, photosynthesis and advanced topics in metabolism. Topics of current interest may also be included. Through both written and oral presentation, students develop their abilities to use the scientific literature and communicate in science. Prerequisite: CHEM 309 or permission of instructor. Also required for biochemistry major. *Also offered as BIOCH 415.*

440. Conservation Biology. (with lab) (1.25 units)

This senior capstone course examines the problem of maintaining biological diversity in a changing world. Emphasis is on the biological concepts involved in population biology, genetics and community ecology, and their use in conservation and management of biodiversity. Labs mix local projects and trips to sites of interest for conservation. Prerequisite: BIOL 221 or 245. Also required for the conservation biology major.

447, 448. SYE: Special Topics.

These courses on topics not regularly offered in the curriculum are intended for senior majors only. May be offered for .5 or 1 unit of credit and may include a laboratory. Prerequisites depend on course content and consent of instructor.

460, 461. Seminar in the Techniques of Teaching Biology.

468, 469. SYE: Tutorial Research. (.5 or 1 unit)

Mentored study and research that is not experimental in design yet requires the analysis of primary literature-based data and the integration of this with current knowledge of the subject matter. A thorough understanding of the methodologies used in acquiring the published data is critical for this integration. Prerequisite: sponsorship by a faculty member.

489,490. SYE: Experimental Research. (.5 or 1 unit)

Field or laboratory research projects for students desiring to pursue directed, experimental research in biology. Students integrate acquired research skills and subject knowledge to collect original experimental data and to analyze the results in reference to the existing scientific primary literature. Prerequisite: sponsorship by a faculty member.

499. SYE: Honors Research. (.5 or 1 unit)

Senior students integrate acquired research skills and subject knowledge gained through the major to collect original experimental data and analyze the results in reference to the existing scientific primary literature. Graduation in biology with the designation of honors requires exceptional academic accomplishment as demonstrated by a major GPA equal to or above a 3.5, completion of a second semester of SYE honors research according to established guidelines, a public presentation of results, and an honors thesis that is bound and archived in the department and in the science library. Prerequisite: sponsorship by a faculty member and nomination by honors committee. See honors guidelines above or at the Biology Department's webpage.

## Biology–Physics

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Interdisciplinary major offered.

More information on this interdisciplinary major can be found at <https://www.stlawu.edu/offices/physics/biology-physics>.

### Required Courses

Physics (4): PHYS 151 or 103, PHYS 152 or 104, PHYS 221, PHYS 222

Biology (4): BIOL 101, 102, and two courses at the 200 level or above, one of which should include a lab or be at the 300 level.

Biology *or* Physics:

Two additional units chosen from appropriate courses at the 300 level or above in biology and/or physics.

Chemistry (2): CHEM 103 and 104

A senior research project in some area of biophysics, with advisors from both biology and physics.

## Recommended Courses

CHEM 342. Thermodynamics and Kinetics.

MATH 205. Multivariable Calculus.

Math 230. Differential Equations.

Advising is provided through both the biology and physics departments. Since this major is expected to serve students with a wide range of interests, anyone interested is encouraged to consult with these departments about appropriate scheduling of courses, including interdepartmental offerings.

Students contemplating this major should also be aware of possibilities for advanced placement in chemistry, mathematics and physics courses that could provide added flexibility to their program. PHYS 151/152 is better preparation for PHYS 221/222 than PHYS 103/104, but any combination of the introductory sequence is acceptable.

## Biomedical Sciences

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Major Offered.

Note that Biomedical Sciences majors cannot double major or minor in Biology, Biochemistry, Neuroscience, Biology-Physics, Conservation Biology, or Environmental Science-Biology.

Visit the Biomedical Sciences web page at <https://www.stlawu.edu/offices/biology/biomedical-sciences>.

## Advanced Placement Exams

Students scoring a 4 or 5 on the AP biology exam or a 5, 6 or 7 on the IB exam should enroll in the first semester of General Biology (BIOL 101) for 1.25 units of credit toward the major and graduation. Students who do well in 101 may be permitted to bypass the second semester of General Biology course (BIOL 102), receiving the 1.25 units of credit for this course as well as the right to take courses that require BIOL 102. Approval of this option to bypass the BIOL 102 course is determined by the General Biology course instructors.

Although AP or IB scores noted above automatically nominate students for this bypass option, students may voluntarily choose to stay in the General Biology course-sequence and enroll in BIOL 102. Further, some professional schools (particularly health professional schools) do not accept AP credit for BIOL 101 and 102, which students should take into consideration when making this decision.

## Major Requirements

Students entering St. Lawrence with an interest in Biomedical Sciences should enroll in General Biology (BIOL 101 and 102) during their first year. They should also seek early advisement by a Biomedical Sciences faculty or staff member. Biomedical Sciences majors must complete a predetermined set of

courses (outlined below). Continuation in upper-level biology electives courses requires a grade of 2.0 or higher in BIOL101 and 102.

## Required Courses

Full course descriptions can be found by visiting the Catalog section for the sponsoring department.

### Core Courses

Students must take all of the following courses:

- BIOL 101 and 102 General Biology with Lab
- CHEM 103 and 104 General Chemistry with Lab
- BIOL 245 Genetics OR BIOL 250 Introduction to Cell Biology
- STAT113 Applied Statistics

Students must take TWO of the following courses:

- BIOL 231 Microbiology with Lab
- BIOL 315 Human Nutrition
- BIOL 341 Anatomy & Physiology I with Lab
- BIOL 351 Anatomy & Physiology II with Lab
- CHEM 221 Organic Chemistry I with Lab
- CHEM 222 Organic Chemistry II with Lab

### Electives

Students must take four additional courses from this list, three of which must include a lab.

- BIOL 227 Mammalogy with Lab
- BIOL 231 Microbiology with Lab\*
- BIOL 245 Genetics\*
- BIOL 250 Introduction to Cell Biology\*
- BIOL 252 Research Methods in Cell Biology w/Lab
- BIOL 258 Ethnobotany with Lab
- BIOL/NRSCI 288 Introduction to Neuroscience with Lab
- BIOL/CHEM/BIOCH 309 Biochemistry
- BIOL 315 Human Nutrition\*
- BIOL 333 Immunology with Lab
- BIOL 341 Anatomy & Physiology I with Lab\*
- BIOL 350 Cancer Biology
- BIOL 351 Anatomy & Physiology II with Lab\*
- BIOL 353 Human Embryology
- BIOL 370 Hormones, Disease, and Development
- BIOL/NRSCI 387 Cellular Mechanisms of Memory
- BIOL/NRSCI 388 Drugs & the Brain with Lab
- BIOL/NRSCI 389 Advanced Neuroscience
- BIOL 392 Research Methods in Fluorescence & Confocal Microscopy (Lab)
- BIOL 394 Research Methods in Biochemistry (lab)

- BIOL 395 Research Methods in Molecular Biology (Lab)
- BIOL/NRSCI 399 Current Topics in Neuroscience

\* if not taken to fulfill a Core requirement

### **Biomedical Contexts Courses**

Students must take two courses from this list. Other courses may be considered to fulfill this requirement; students should contact Biomedical Sciences advisors with questions.

- ANTH 242 Dealing with the Dead
- ANTH 270 Plagues and Peoples
- BIOL 412 Cross-Cultural Healing
- EDUC/GNDR 325 Sexuality Education
- GNDR 224 Global Advocacy for Women's Sexual Reproductive Health & Rights
- GS 264 Global Public Health: Critical Approaches
- GS 268 Global Health and Justice
- GS 365 Rethinking Population, Health, and Environment
- HIST 294 Medicine & Empire
- PCA 335 Sex Talk
- PCA 370 Against Health: Rhetoric & the Health Humanities
- PHIL 347 Philosophy of Psychiatry
- PHIL 354 Biomedical Ethics
- SOC 225 Women's Health & Aging
- SOC 246 What's So Bad about Aging? with CBL
- SOC 275 Medical Sociology
- SOC 308 Death & Dying

### **Experiential Learning Component**

Students must complete one of the options listed here and complete an accompanying Reflection Statement. Experiences may or may not be credit-bearing but should be selected in consultation with a Biomedical Sciences advisor. Non-credit bearing options can be completed inside or outside of St. Lawrence University but must be approved by the Biomedical Sciences advisors. Please see the BMS major website for how to document this experience and prepare the Reflection Statement at this link: <https://www.stlawu.edu/offices/biology/biomedical-sciences>.

### **Credit Bearing Options**

- BIOL 304 & 305 Health Coaches I and II
- BIOL 489 OR 490 SYE Research (1 unit total) in one of these departments: Biology, Biochemistry, Biology/Physics, Chemistry, Neuroscience, or Psychology

### **Non-credit Bearing Options**

- Certified Nursing Assistant (CNA) training
- Certified Phlebotomy Assistant Training
- Emergency Medical Technician (EMT) training
- Hospice training and volunteering
- Approved external internship

- Approved external research opportunity
- St. Lawrence University Fellowship
- McNair Fellowship
- CSTEP Internship/Fellowship

## Independent Research and Senior Year Experience

Students who wish to conduct independent research may do so by taking customized research methods courses (BIOL 381 and 382), or as seniors, by taking BIOL 468 and 469 (SYE: Tutorial Research) and BIOL 489 and 490 (SYE: Experimental Research). Students must discuss possible projects with members of the Biomedical Sciences faculty.

The Biology department, which includes the Biomedical Sciences major, has formally adopted a Research Integrity Policy model based on the federal Public Health Service policy of the Office of Research Integrity (see [www.ori.dhhs.gov](http://www.ori.dhhs.gov)). All faculty and students are expected to adhere to this policy while engaged in their research. Any concerns or questions should be brought to the Biology department co-chairs.

## Honors in Biomedical Sciences

To graduate with honors in Biomedical Sciences normally requires 1 unit of independent research and 1 unit of honors -research in different semesters, a 3.5 major GPA, submitting a signed honors nomination form, a thesis, a public presentation, and approval of the honors project committee. A student wishing to be considered for honors in Biomedical Sciences should enroll in SYE research (BIOL 468, 469, 489, or 490) during the first semester of research (usually, but not limited to, the fall semester of the senior year) for 1 unit of credit. The student, in consultation with the project advisor, should choose an honors project committee comprised of the project advisor and two other faculty members appropriate to the topic (one of these two may be from another department). This honors committee should be formed as soon as possible in the first semester of research. At the end of the first semester, the honors project advisor, in consultation with the other members of the honors committee, evaluates a formal research proposal and progress toward the completion of the project. If the project is deemed worthy of honors in Biomedical Sciences, the student is nominated as a candidate for honors and submits the honors nomination form to one of the department co-chairs. The student can then enroll in BIOL 499 (SYE: Honors Research) for the second (usually spring) semester for 1 unit of credit.

## Business in the Liberal Arts

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Major offered.

Visit the program's Web page at [www.stlawu.edu/business-liberal-arts](http://www.stlawu.edu/business-liberal-arts).

Students may declare the Business in the Liberal Arts major during the second semester of their sophomore year, but no sooner, and normally they may not declare the business major after the first

semester of their junior year. Before declaring the Business in the Liberal Arts major, students must have already declared their primary major.

## Major Requirements

- I. Business in the liberal arts majors are required to complete a second major (i.e., they must double-major in business in the liberal arts and one other field) at St. Lawrence University.
- II. All business in the liberal arts majors must complete the following seven courses:
  - ECON 100. Introduction to Economics.
  - ECON 251. Intermediate Microeconomics.\*
  - ECON 252. Intermediate Macroeconomics.\*
  - ACC 203. Financial Accounting.
  - ACC 204. Managerial Accounting.
  - STAT 113. Introduction to Statistics.
  - PHIL 202. Reasoning.

\* These courses should be completed before the second semester of the student's junior year. Normally, students who have not completed these courses by this time will not be allowed to declare the business in the liberal arts major.

- III. Business in the liberal arts majors must complete at least one experiential learning opportunity:
  - Approved Internship
  - Community-Based Learning
  - Off-campus Study
- IV. Business in the liberal arts majors must complete one course in three of the following four elective areas. Students double-majoring in economics and business in the liberal arts may not take their business electives from courses taught in the economics department. Students may petition the business in the liberal arts program coordinator for additional courses they believe may satisfy one of these elective areas but are not listed below. Special Topics courses may not be used as electives in the business in the liberal arts major. Because the business in the liberal arts major relies on courses taught within the existing course structure at St. Lawrence, transfer courses must be approved by the appropriate department as a St. Lawrence course equivalent to count toward the Business in the Liberal Arts major. Additionally, because the program relies on courses taught through the regular curriculum the program coordinator is unable to approve transfer courses for St. Lawrence credit. Descriptions of these elective areas and courses that satisfy the elective areas defined below may be found at <http://myslu.stlawu.edu/~bchezum/index.html>.
  - Social Responsibility
  - Global Citizenship
  - Analytical Thinking
  - Social Contexts

## Honors

Students wishing to complete honors are encouraged to do so in their primary major.

## Canadian Studies

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Combined major and minor offered.

Visit the Canadian studies webpage at [www.stlawu.edu/canadian-studies](http://www.stlawu.edu/canadian-studies).

### Combined Major Program

Under the Canadian studies combined major program, students fulfill all the major requirements of one department in the social sciences or humanities, such as government or history. In addition, all Canadian studies combined major programs require the following courses:

101. Introduction to Canada. (1 unit)

201. Canadian-American Relations. (1 unit) *and/or*

202. Quebec. (1 unit)

401. Junior/Senior Seminar. *or*

479,480. SYE: Internship. *or*

489,490. SYE: Independent Project. *or*

498,499. SYE: Honors Thesis. (1 unit)

Electives from offerings in Canadian Studies in the various academic departments\* (4 units)

**Total:** 7 units\*

\*Electives from the department offerings should be chosen partially from the electives in the departmental half of the student's combined major. A combined major of up to 14 courses is thus possible. In no case may more than 16 courses be pursued for a combined major.

### Minor Requirements

To minor in Canadian Studies, a student is encouraged to take CNS 101, 201 or 202, and three courses on Canada from those offered by the several academic departments. The three elective courses must be approved by the chair of the Canadian Studies department.

### Courses

101. Introduction to Canada.

A multidisciplinary seminar designed to provide students with a comprehensive introduction to Canada. The course stresses the basics of geography, history, economics, politics and culture. At the same time, it uses contemporary events and issues (such as ongoing debate over Canada's constitutional and economic directions) to demonstrate the importance of geographic fact, historical frictions and political and cultural diversity to an understanding of the Canadian nation(s). Major consideration is given to the ways Canada is both similar to and different from the United States.

201. Canadian–American Relations.

Examination of the economic, cultural, military and environmental aspects of the Canada-United States relationship, as well as of the public and private institutional arrangements involved in the maintenance of that relationship. Although the evolution of the Canadian-American interaction is dealt with, the emphasis is on the contemporary period. *Also offered through Peace Studies.*

202. Québec.

This multidisciplinary seminar builds on Introduction to Canada by focusing on Québec from a variety of perspectives. A distinct society with French as its dominant language and culture, Québec is unique within North America. Its geography, history, culture, economics, politics and place in the Canadian Confederation are explored, as well as Québec's presence on the world stage as a member of the Francophonie. Throughout, the French influence on the rest of North America is examined.

401. Junior/Senior Seminar.

This multidisciplinary seminar is offered periodically as capstone to the combined major or minor. Topics vary. Past offerings have included Canadian biography, the Group of Seven, Emily Carr, and Canada at 150. Prerequisite: permission of instructor.

479, 480. SYE: Internship.

Prerequisite: permission of program director.

489, 490. SYE: Independent Project.

Prerequisite: permission of program director.

498, 499. SYE: Honors Thesis.

Prerequisite: permission of program director.

Plus, offerings in several departments.

# Caribbean, Latin American, and Latino Studies

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Minor offered.

Visit the Caribbean, Latin American, and Latino Studies program website:

<https://www.stlawu.edu/caribbean-latin-american-and-latino-studies>.

## Minor Requirements

Students must earn six units of CLAS credit from at least two departments and/or programs to complete the minor. Among these, students must complete at least one of the following survey courses:

CLAS 104/HIST 115 or CLAS 104/SPAN 105. Introduction to Caribbean and Latin American Studies.

CLAS 105. Introduction to Latino Studies and Latino Cultural Expressions.

CLAS/SPAN 201. Advanced Spanish Language and Cultures.

CLAS/SPAN 202. Hispanic Cultural Studies.

CLAS/GOVT 228. Latin American Politics.

CLAS/HIST 233. Colonial Latin America.

CLAS/HIST 234. Modern Latin America.

CLAS/SPAN 221. Latin America in Film.

Students must complete an additional five units, which may include other courses from the list of survey courses. These five elective units will be courses that are multi- or cross-listed with CLAS.

Courses taken at the off-campus programs in Trinidad and Costa Rica automatically qualify towards the CLAS electives. Courses taken at an ISEP program in the Caribbean or Latin America also automatically qualify. Courses designated as CLAS and taught at the Madrid campus also qualify.

Transfer units, courses at SLU off-campus programs other than those noted above, summer courses and internships accredited through a SLU department that pertain to the Caribbean or Latin America may be counted if approved in writing by the CLAS Coordinator before they are taken.

## Courses

### 103. Introduction to Ethnic Studies and Social Justice

This course attempts to familiarize students with the different roles different ethnic groups have played in the development of the American nation since settler colonialism began. Students will be exposed to readings and case studies that grapple with the way racialized societies affect inequities in wealth, quality of life and in general access to public goods. In particular we will focus on how such trends are increasing not only in the United States, but also globally. Students in this course will tackle the following questions through key readings, group exercises, journal entries and blogs: How are identities, experiences, and structures of race, ethnicity, and class intertwined with social justice in the American context? How has the meaning of racial justice transformed over the course of the 20th and early 21st century in the United States? We will explore the way the histories of Latinos, African Americans, Asian Americans and Native Americans are deeply connected to the very foundation of the American nation.

104. Introduction to Caribbean and Latin American Studies.

This interdisciplinary core course is designed to introduce students to the richness and diversity of Latin American cultures, the region's turbulent history of conquest and colonization, and the problems of its development. The course familiarizes students with the vitality of Latin American art and literature and relates Latin American culture with *cultura latina* in the United States. The course provides a framework for more advanced studies on Caribbean and Latin American themes. It may be offered by the Department of History, as HIST 115, or by the Department of World Languages, Cultures, and Media, as SPAN 105.

105. Introduction to Latino Studies and Latino Cultural Expressions

This introductory course on Latino Cultural expressions will help students understand the complexities involved in the dynamics of Latinos in the US history, economy, politics and cultural expression. Some questions that we will ask in this course are: While Latinas/os have been integral to U.S. history and culture, why have they frequently and consistently been depicted as either outsiders or foreign and how is Latina/o identity negotiated? How do we explain the presence of different Latino groups in the US and what are the cultural expressions that are taking place in the US due to these migration waves? What are some of the dynamics that are taking place between Latino/a cultural production in relationship both to larger U.S. culture and to other U.S. racial and ethnic groups? We will also question the development and /or existence of *Latinidad* - the relationship between and common culture among Latino/as in U.S. culture and how it manifests itself through cultural expressions such as literature, music, films and social media. Our readings focus on musical genres, writers and popular culture from various Latino/a groups. Our topics will include: migration, language, the body, gender roles, sexual orientation and identity politics in the works of authors and artists.

201. Advanced Spanish Language and Cultures.

This class reviews and expands the four language proficiency skills (listening, speaking, reading & writing) while developing students' cross-cultural competence and critical thinking. The emphasis is on the oral and written expression of ideas in Spanish. Materials include readings and videos on topics of current interest and cultural significance in the Spanish-speaking world. For students who have completed Spanish 103, 104 or who have four years or more of Spanish at the secondary level.

202. Hispanic Cultural Studies.

A language course with the aim of acquainting students with current Hispanic culture through the analysis of literary texts, films, advertisements and other materials drawn from Spain, Hispanic America and the Latino community in the United States. Includes a research project on a cultural topic.

221. Latin America in Film.

This class examines how Latin America is represented in films by directors from Hispanic America, Brazil, Europe and the United States. The films form the basis of conversation and research on themes related to contemporary history, interethnic conflict, traditional gender roles and immigration. The class is conducted entirely in Spanish, though some of the theoretical and technical readings on film are in English.

### 255. Latino Popular Culture.

We will examine media organizations and their participants in their roles in shaping popular culture. We will also reflect on the impact of Latino media production on identity formation as a mode of revealing and reproducing ideology and political struggle. This course includes key readings in cultural economy, political economy, cultural studies, history and sociology. Emphasis is on various cultural expressions of ethnic subcultures in the United States and their complex negotiations with the dominant culture and their co-resisters in a global/local struggle over meaning.

### 302. Latino Cultural Studies and Cultural Analysis

Students will be exposed to the understanding of forces behind the production and circulation of cultural artifacts (e.g. films, regional fiction, romance novels, advertising) and their meanings; the cultural construction of race, ethnicity, and gender; the visual and spatial dimensions of everyday experience; and the relationship of private and public spheres. The course is focused on the historical, social and cultural experience of Latino communities and will expose students to the understanding and deconstruction of cultural artifacts, such as art, music, or literature, and cultural identifications, such as popular, sexual, racial, or national identities.

### 352. Clinic: The Effects of Globalization on Human Rights

Students will be exposed to some of the ways in which drastic global economic and social re-structural policies are shaping the living conditions and have infringed on human rights in Latin America. This Clinic seeks to develop both theoretical and practical skills, through students' involvement in concerted and focused activities including research and documentation of human rights violations, and in the support of advocacy initiatives before different NGOs and/or institutions.

### 3000-3999. Special Topics.

Special topics courses offer students the opportunity to study specific topics in CLAS when offered by departments. The content of each course or section of these 200-level special topics courses varies and will be announced each semester.

### 4000-4999. Special Topics.

Special topics seminars offer students the opportunity to study specific topics in CLAS when offered by departments. The content of each course or section of these 300- or 400-level special topics courses varies and will be announced each semester.

### CLAS 479. Independent Study.

This course offers students the opportunity to conduct an in-depth investigation of a particular topic on an individual basis with a CLAS faculty sponsor.

CLAS 489,490. SYE Independent Study.

Independent research project for seniors only, with supervision from a CLAS faculty sponsor.

## **Departmental Offerings**

### **Environmental Studies**

372. Transboundary Wildlife Conservation.

This course will explore ecological and cultural values as viewed within and beyond political borders, protected areas, and private land using transboundary wildlife case studies. The enigmatic Gray Wolf has had a dramatic chronicle across North America including persecution, protection, and delisting, and will be a primary-course case study. Students will select a transboundary species and develop a historical 'story-board' spatial analysis for presentation. Written research papers will include a scientific literature review on transboundary species ecology and a comparative policy paper. A final synthesis will be required and developed as a diagrammatic conceptual model.

### **Geology**

320. Regional Field Studies: Caribbean (0.5 credits).

Field-based studies form the core of geological inquiry. The purpose of this course is to enrich students' understanding of the process of conducting geological research in the field. The course consists of on-campus trip preparation and data analysis and reporting, and a field trip to the Caribbean lasting approximately two weeks. Field trip locations and topics vary. Students may be responsible for some costs. Instructor permission required.

### **Government**

228. Latin American Politics.

This course introduces students to the politics of Latin America, a geographically and socially diverse region with wide-ranging levels of economic development. Tracing the roots of current political conflict to the colonial era and early years of independence under the shadow of an increasingly powerful United States, the primary focus of the course is on political change in Latin America today.

337. Torture, Truth and Memory.

Authoritarian regimes have often committed massive human rights abuses that included murder, torture, disappearances and forced adoptions. Drawing on memoirs, torturers confessions, declassified documents, films, literature and analytical texts this course explores the ongoing struggle over who will interpret the political past, and what roles justice and forgiveness might play in securing democracy for the future. Also offered through Peace Studies.

### 381. U.S. Foreign Policy Toward Latin America.

This course tracks the development of U.S. policy toward Latin America and shows how asymmetric power relations have influenced resolution of key problems in the Western Hemisphere. The course will review formative events such as U.S. military occupation of countries in the Caribbean Basin and Cold War covert operations. Students will consider how the United States and Latin America see shared policy problems differently, including the debt crisis, immigration, illicit drug flows, and environmental problems.

## History

### 233. Colonial Latin America.

This course surveys the formation and historical development of colonial Latin America. We begin with initial encounters between indigenous peoples of the Americas and Iberians in the 15th century and end with Portugal and Spain's loss of their mainland colonies in the Americas in the 1820s. Part of our task is to understand the dynamics of race, class and gender in the colonial societies that developed from the violent collision of cultures during the conquest.

### 234. Modern Latin America.

This course surveys the history and development of modern Latin America. We begin with a brief overview of the colonial and early national periods, but the main focus of the course is from 1870 to the present. Some of the issues that concern us include the historical roots of the human and cultural diversity of modern Latin America, the region's relationships to a changing world economy, politics and human rights, and migration and diasporic cultures. Also offered through Peace Studies.

## Philosophy

### 225. Latin American Philosophy

More than simply philosophical work from Latin America or from Latin American thinkers, Latin American philosophy is a distinctive philosophical tradition, emergent, in the words of Enrique Dussel, from "the underside of history". Although the characteristics of Latin American philosophy are hotly debated, suggested themes and commonalities include: 1) attention to lived experience and the role of social, political, and historical location in shaping the pursuit of truth and justice; 2) contemporary reverberations of indigenous thought; 3) inquiry into what it means to be 'Latin American' and/or 'Latinx'; and 4) an urgent concern for liberation from colonialism and oppression. In this class, we read works from thinkers who are aligned with this contested tradition while also grappling with the philosophical question of what makes Latin American philosophy what it is. Mirroring the field's own tendencies towards situated and engaged philosophy, the course strives to attend to the distinctive historical, social, and political contexts out of which these texts emerge while also highlighting their relevance to struggles for liberation today. Indeed, no tradition of critical inquiry and philosophical reflection may be more relevant to the contemporary moment; whether it be the issue of immigration, colonialism and decolonialization, or the search for identity, Latin American philosophy cuts to the quick of the social and political issues of our times, deploying philosophy itself as a tool of change. Fulfills DIV13 Distribution.

## **Religious Studies**

238. Global Christianities.

This course explores Christianity outside the United States and Europe. Catholic and Protestant Christianities in addition to newer forms of Christianity are included, and case studies are drawn from Africa, Asia, and Latin America. Pentecostal Christianity (also called Charismatic Christianity) is a particular focus. The course considers the conflict and interplay of older forms of Christianity, often part of the inheritance of colonialism, with more recent arrivals; probes the relationship between religion and the processes of globalization; and questions whether any of these forms of Christianity can be described as globalized, and, if so, whether global Christianity resists or supports globalization. Also offered in Global Studies.

## **World Languages, Cultures and Media**

### **Spanish**

103,104. Intermediate Spanish.

206S. Spain and Latin America: Construction of a Common Cultural Space. (Spain Program)

The “España y América Latina: la construcción de un espacio cultural común” course touches on Latin American and Spanish fundamental topics in anthropology, focusing on cultural heritage and colonization discourses and how they are reflected in the collective imagination on both sides of the Atlantic. The course analyzes the challenges and the role of such challenges in the globalized world with its sociodemographic and cultural specificities.

246. Oral Expression in Spanish.

Analysis of contemporary oral usage through the study of film, video and audio materials as well as printed texts. Advanced pronunciation practice. Study of techniques of oral presentation. Assignments are designed to promote the development of persuasive skills and include formal debates on contemporary issues and other public speaking activities.

489, 490. SYE: Independent Study.

Independent study in French, Portuguese or other fields and departments may be credited to CLAS with permission of the coordinator.

Additional information and a complete list of the approved courses for the minor can be obtained through the coordinator of Caribbean, Latin American and Latino Studies or the Center for International and Intercultural Studies.

## Chemistry and Pre-Health Chemistry

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Major and minor offered; major in biochemistry jointly administered with biology; major in pre-health chemistry offered, combined major with environmental studies, and 3:2 engineering combined.

More information on these majors and important advice on planning for this major can be found at <https://www.stlawu.edu/offices/chemistry>.

### Chemistry Major Requirements

A student majoring in chemistry elects from two basic courses of study:

**Plan 1** provides basic preparation for medical or dental school and secondary school teaching. It also provides greater flexibility for those who wish to participate in study abroad programs or are pursuing double majors.

**Plan 2** is endorsed by the committee on professional training of the American Chemical Society (ACS); satisfactory completion of this course of study entitles the student to certification by the society. Those contemplating graduate study in chemistry or careers in industrial research are encouraged to opt for this plan.

The core chemistry requirements **for both plans** are:

- CHEM 103 & 104. General Chemistry
- CHEM 205. Quantitative Analysis
- CHEM 221. & 222. Organic Chemistry
- CHEM 341. Quantum Chemistry
- Two 0.5 unit SYE courses over two semesters (Unless special permission is obtained in advance to do the full unit in one semester), CHEM 489 and/or 490 (must be original research for plan 2)

\*It is recommended that CHEM 103 and 104 be taken during the first year, CHEM 221 and 222 during the second year, and CHEM 205, during the spring semester second year.

#### Additional chemistry courses required for Plan 1:

- 2 courses chosen from the following:

Inorganic chemistry (CHEM 303), Biochemistry (CHEM 309), Thermodynamics and Kinetics (CHEM 342), Environmental Chemistry (CHEM 306)

- 2 advanced laboratory courses selected from:

Environmental Chemistry (CHEM 306), Physical Chemistry Lab (CHEM 353, 0.5 unit), Advanced Organic Chemistry (CHEM 351 or CHEM 354, 0.5 units each), Biochemistry Research Methods (CHEM 394, 0.5 or 1.0 unit), Instrumental Analysis (CHEM 452, 0.5 unit), Advanced Inorganic Chemistry Lab (CHEM 451, 0.5 unit).

#### Additional chemistry courses required for Plan 2:

- CHEM 342. Thermodynamics and Kinetics
- CHEM 303. Inorganic Chemistry
- Biochemistry, requirement—see below.

- 4 advanced laboratory courses—see below.
- 1 in-depth course—see below.

Note: courses may double-count towards the biochemistry, advanced laboratory, and in-depth requirements.

For the biochemistry requirement, choose one of the following:

Biochemistry (CHEM 309) or Biochemistry Research Methods (CHEM 394, 0.5 or 1 unit) or Synthesis of Pharmaceutical Substances (CHEM 324)

For the 4 advanced laboratory courses:

2 must come from the following list:

Physical Chemistry Lab (CHEM 353, 0.5 unit), Advanced Inorganic Chemistry Lab (CHEM 451, 0.5 unit), Biochemistry research methods (CHEM 394, 0.5 or 1.0 unit),

2 additional laboratory courses may include the remaining labs from above or any of the following:

Advanced Organic Chemistry (CHEM 351 or CHEM 354, .5 unit each), Instrumental Analysis (CHEM 452, 0.5 unit), Environmental Chemistry (CHEM 306, 1.25 unit)

For the in-depth course, choose one of the following:

Advanced Organic Chemistry (CHEM 351 or CHEM 354, 0.5 unit each), Instrumental Analysis (CHEM 452, 0.5 unit), Advanced Inorganic Chemistry Lab (CHEM 451, 0.5 unit), Synthesis of Pharmaceutical Substances (CHEM 324, 1 unit), Advanced Biochemistry (CHEM 415)

#### **Required courses in other departments:**

- MATH 135 & 136. Calculus\*
- PHYS 103, 104 or 151, 152 for plan 1. PHYS 151, 152 for plan 2.\*

\*We recommend completing the math requirements in the first year and physics during the second year.

**Note:** to fulfill prerequisites for moving from CHEM 103 to 104, a grade of 1.75 is required. To advance from CHEM 104 to 221 and 205, from 221 to 222 and from 222 to 309 requires a grade of 2.0 or higher.

Except for transfer students, a maximum of two courses applied toward the chemistry major or minor may be taken at other institutions.

## **Pre-Health Chemistry Major Requirements**

A major in Pre-Health Chemistry provides basic preparation for post-bac programs in health fields including medical, veterinarian, dental and pharmacy. It also provides greater flexibility for those who wish to participate in study abroad programs or pursue additional majors or minors. As part of the degree, students take two courses that investigate the implications of various social constructs on health and healthcare.

The core pre-health chemistry requirements are:

- CHEM 103 & 104. General Chemistry
- BIOL 101 & BIOL 102. General Biology

- CHEM 221. & 222. Organic Chemistry
- CHEM 309. Biochemistry
- Two 0.5 unit SYE courses over two semesters (Unless special permission is obtained in advance to do the full unit in one semester), CHEM 489 and/or 490 (discuss options with your advisor).

\*It is recommended that CHEM 103 and 104 be taken during the first year, CHEM 221 and 222 during the second year, and CHEM 309 during the junior year.

## **2 Advanced Chemistry Courses selected from:**

Inorganic Chemistry (CHEM 303), Environmental Chemistry (CHEM 306), Synthesis of Pharmaceutical Substances (CHEM 324), Quantum Chemistry and Spectroscopy (CHEM 341), Thermodynamics and Kinetics (CHEM 342), Advanced Biochemistry (CHEM 454)

## **2 Advanced Laboratory Courses selected from:**

Research Methods in Molecular Biology (BIOL 395), Environmental Chemistry (CHEM 306), Advanced Organic Chemistry (CHEM 351), Advanced Organic Synthesis (CHEM 354), Physical Chemistry (CHEM 353), Research Methods in Biochemistry (CHEM 394), Instrumental Analysis (CHEM 452), Advanced Inorganic Chemistry (CHEM 451)

## **2 Health in Society Courses selected from:**

Check pre-requisites for these courses prior to the semester you plan to take them.

Zombies, Epidemics & Illnesses in Francophone World (AFS 3045), Health and Healing in Africa (AFS 4015/HIST 4017), Medicines and Meanings (ANTH 3072), Anthropology of the Body (ANTH 4020), Cross Cultural Healing (BIOL/GS/REL 412), Sexuality Education (GNDR/EDU 325), Dis/Ability, Gender and Health (GNDR 4020), Global Public Health (GS 264), Global Health and Justice (GS 268), Global Public Goods (GS 324), Rethinking Population, Health and Environment (GS 365), Medicine and Empire (HIST 3047), Taboo Performances (PCA 343), Against Health: Rhetoric & the Health Humanities (PCA 370), Foundations of Community Health (PH 3011), Introduction to Public Health (PH 216), Social Determinants of Health (PH 4001), Biomedical Ethics (PHIL 354), Health Psychology (PSYC 256), 2 Women's Health & Aging (SOC 225), Aging and Society w/ CBL (SOC 246), Medical Sociology (SOC 275), Death and Dying (SOC 308)

## **Required courses in other departments:**

- MATH 135. Calculus
- PHYS 103, 104 or 151, 152

## **Minor Requirements**

A minor in chemistry entails completion of CHEM 103-104, CHEM 221, two additional electives at the 200 level or above, and one additional elective at the 300 level or above. An SYE mentored by a chemistry professor, following all chemistry SYE guidelines, may serve as one of the electives.

## Combined Major

A combined environmental studies–chemistry major is available. Refer to the entry for Environmental Studies in this *Catalog* for details.

## 3:2 Chemical Engineering

Refer to the entry for Engineering in this *Catalog* for details.

## Planning

Because of course prerequisites, it is important that those considering a chemistry major complete General Chemistry in their first year and discuss their plans with a chemistry faculty member. While there is some flexibility to allow for off-campus programs or late starts in the major, such options require careful planning. It is also important to schedule in the mathematics and physics prerequisites for upper-level chemistry courses.

## Suggested Courses

Many of the most important and stimulating chemical research areas involve projects at the interface of chemistry with other disciplines, including biology, geology, physics, psychology, and computer science. Based on their interests, students should consider introductory and advanced coursework in at least one of these disciplines.

## Research and Independent Study

Student research is at the heart of the chemistry curriculum and culminates in a year-long senior project carried out in close collaboration with a faculty mentor. Students are encouraged to avail themselves of research opportunities prior to the senior year. Both academic year and a limited number of paid summer research assistantship positions are available every year. The Stradling Fund provides a stipend for a research assistantship each summer and other sources of funding are normally available to support summer student research. Many chemistry students have also won SLU fellowships for summer research with a chemistry mentor.

## Honors

Chemistry department honors require a minimum GPA of 3.5 in major courses, original laboratory research, and the submission and defense of a thesis. The student must consult with the project mentor and assemble a thesis committee including three faculty members (at least two from chemistry) by the end of the first semester of their senior year. The committee will conduct the oral examination that is part of the student's presentation and defense. Qualified students can elect to complete the requirements for honors within the context of the senior project. A minimum grade of 3.5 on the senior project is required for honors. Students do not register for honors; an honors award will be reflected with a course title and number change on the transcript.

## Advanced Placement Credit

Students scoring a 4 or 5 on the AP chemistry exam or a 6 or 7 on the high level chemistry IB exam are eligible to receive 1.25 units of credit for CHEM 103. These students may enroll in CHEM 104 in the spring but may choose to enroll in CHEM 103 in the fall if they prefer.

## Courses

103, 104. General Chemistry. (1.25 units each)

These courses are an introduction to chemistry for science and non-science majors. Both courses use in-class experimentation, discussion, and lecture to ask and answer questions of general chemical interest, including applications in biology, physics, astronomy and geology. Students discuss experimental data using the logic and language of chemistry and are frequently asked to substantiate conclusions using both conceptual and quantitative reasoning. Topics include water and its unique properties, atomic structure and properties, molecular structure, types of chemical bonding and reactions, redox systems and electrochemistry, reaction equilibria, thermodynamics and kinetics. Three class periods plus one laboratory period per week; students may also participate in optional weekly peer-led team learning workshops. Prerequisites: secondary school algebra or enrollment in a college mathematics course. A grade of 1.75 or higher in 103 is required to fulfill the prerequisite for enrollment in 104. A grade of 2.0 or higher in 104 is required to fulfill the prerequisite for enrollment in 200-level chemistry courses. Required for the neuroscience major.

106. Chemistry and Environment

Chemistry and environment is designed for non-science majors who wish to learn chemistry at the introductory level. In this course, we will explore the distribution and interaction of chemicals in air, water, and soil, as well as how human activities affect the chemistry of Earth. We will discuss how chemistry can help us understand local and global environmental issues, and what it tells us about possible solutions. Some questions that we will address in this course include: How can chemistry help prevent, diagnose, and solve environmental problems? How do people use chemistry to understand and create a more sustainable world? *Also offered as ENVS 106.* Offered every other spring semester (on even years).

3000–3999. Special Topics in Chemistry.

The content of each course or section of these 100- or 200-level special topics courses varies and will be announced each semester. They may be intended for majors or nonmajors. Not all of these courses will count toward the chemistry major, minor, or the Chymist Honor Society.

205. Quantitative Analysis. (1.25 units)

An introductory course dealing with the chemical, physical and logical principles underlying modern quantitative chemical analysis. Among the broad topics treated are data evaluation, titrimetry, solution equilibria, chromatography and absorption spectroscopy. Lectures plus one laboratory per week. Prerequisite: CHEM 104 (with a 2.0 grade or higher) or permission of instructor. *Also offered as ENVS 205.* Offered only once per year, usually in the spring semester.

### 221, 222. Organic Chemistry. (1.25 units each)

An introductory course focusing on the chemistry of naturally occurring and synthetic carbon compounds; description and determination of structure with an emphasis on spectroscopic methods; reactivity and its theoretical basis; mechanism; and synthesis of organic compounds. The microscale laboratory emphasizes preparation, purification and identification of organic compounds, isolation of organic substances, mechanistic studies and separation techniques. Spectroscopic methods are applied to structure elucidation. Prerequisites: CHEM 104 with a grade of 2.0 or higher. Acceptance into 222 requires a grade of 2.0 or higher in 221. CHEM 221 is required for the neuroscience major.

### 303. Inorganic Chemistry.

Inorganic chemistry comprises the study of all elements of the periodic table and the trends that unite them. This course begins from a theoretical basis describing chemical bonding and structure in the context of molecular orbital theory and hard/soft acid/base theory. These theories are applied to coordination complex synthesis and the applications of coordination, organometallic, and bioinorganic compounds. Applications of inorganic principles of rational design are explored in fields including medicine, renewable energy, geoscience, and catalysis. Prerequisite: CHEM 222. Offered every other Fall semester (on even years).

### 306. Environmental Chemistry and Toxicology.

This course is designed for chemistry majors and students in environmental studies who have a strong background in chemistry. It explores the chemistry of air, water, and soil, as well as how anthropogenic activities affect the chemistry of Earth. In addition, this course will cover sustainability and green chemistry. Prerequisite: CHEM 221 or permission of instructor. *Also offered as ENVS 306.* Offered every other Fall semester (on odd years).

### 309. Biochemistry.

The course is organized around several themes: the relationship of structure to function in biomolecules, production of energy, regulation and control of metabolism. Topics covered to illustrate these themes include enzyme action and regulation, hemoglobin and the transport of oxygen and carbon dioxide, metabolism of carbohydrates for energy production, structure and function of biological membranes, and structure and function of molecules involved in transmission and expression of genetic information. Prerequisite: CHEM 222 with a grade of 2.0 or higher or permission of instructor. Counts toward the neuroscience major (cellular track). *Also offered as BIOCH 309 and BIOL 309.*

### 324. Synthesis of Pharmaceutical Substances.

The discovery and development of new medicines is fascinating and multifaceted, whether you are primarily interested in chemistry, biology, healthcare, or societal impact. In this course, we will look at the whole pharmaceuticals process, from identifying a biological target, to developing potential drug candidates, conducting clinical trials, getting FDA approval, and beyond. This will include looking at the detailed chemical synthesis and molecular structures for specific medicines, some of the historical inequities that are connected with drug development, and how government regulation of pharmaceuticals manufacturing (or lack thereof) has contributed to health crises and influenced public

trust in science-based medicine. While we will discuss many different topics, this course is an advanced chemistry elective and a reasonable level of familiarity with introductory-level organic chemistry is essential. Prerequisite: Chem 222 with a grade of 2.00 or higher. Offered in the spring but not all years.

#### 341. Quantum Chemistry.

A study of the curious consequences of quantization and the wave-particle duality of light and matter in chemical systems. Experimental evidence, usually collected from spectroscopic results, is used to understand the postulates of quantum chemistry and gain insight into the macroscopic properties of atoms and molecules. Topics include tunneling, molecular motions, quantum mechanical origins of orbitals and energy levels of the hydrogen atom, selection rules for spectroscopy and an introduction to computational methods. Offered only in the fall semester. Prerequisites: CHEM 104, MATH 136.

#### 342. Thermodynamics and Kinetics.

This course introduces the mathematical and theoretical bases for chemical equilibria and kinetics. The extrema principle will be used to predict the direction of chemical equilibria in a wide variety of chemical and biochemical reactions. This principle shows that reactions which maximize entropy and minimize enthalpy are spontaneous. We will study several ways to calculate familiar quantities like Gibbs energy, as well as new, more sophisticated quantities like partition functions to better understand molecular driving forces. In the last part of the course, we will study reaction kinetics to determine the timescales and possible reaction mechanisms of favorable reactions. Offered only in the spring semester. Prerequisites: CHEM 104, , MATH 136.

#### 353. Physical Chemistry Laboratory. (0.5 unit)

Laboratory experiments investigate questions in the fields of physical and biophysical chemistry. The lab has two central learning goals: develop your ability to design interesting and feasible research questions and learn how to use a variety of instruments. Spectroscopic methods such as ultraviolet-visible fluorescence, infrared, and Raman are used to characterize unknowns and understand the physical chemistry underlying chemical processes like protein denaturation and energy transfer between molecules. The final project is independent and will be developed in small groups. Discussion of primary literature is used to place experiments in the context of broader scientific knowledge, and to learn more about scientific writing. In writing assignments, data analysis and scientific reasoning are emphasized. This course is normally taken by second-semester juniors. Offered in the spring semester most but not all years. Prerequisites: CHEM 104 and 341 or 342.

#### 351. Advanced Organic Chemistry Laboratory: Synthesis, Separation, and Analysis. (0.5 unit)

This course is designed to introduce students to techniques in synthetic chemistry beyond what has been encountered in CHEM 221 and 222. Students will gain experience synthesizing and characterizing small-molecule organic compounds, organometallic complexes, and polymers. This course also places a major emphasis on advanced nuclear magnetic resonance spectroscopic techniques, including heteronuclear and 2-dimensional NMR spectroscopy. Offered most but not all years, typically in the spring semester. Prerequisite: CHEM 222.

354. Advanced Organic Chemistry Synthesis Laboratory (0.5 unit)

Organic synthesis is the art and science of using simple molecular building-blocks to make complex, valuable molecules. In CHEM 221 and 222, you have been exposed to standard organic reactions and techniques. In Advanced Organic Synthesis Lab, you will: (1) apply previous knowledge to multi-step synthesis; (2) develop the problem-solving skills needed for success in chemical research; and (3) learn some of the more technically challenging reactions and techniques that you would encounter in either an academic or industrial organic synthesis group. Not offered every year. Runs seven weeks. Prerequisite: CHEM 222.

389, 390. Research for Juniors. (0.5 unit)

394. Research Methods in Biochemistry. (Chemistry majors must take this course for 0.5 unit or 1 unit)

This course focuses on introducing basic laboratory techniques and skills that are common in fields related to biochemistry. Attention is paid to both theory and application. Students keep a detailed laboratory notebook and write up an extended project in the style of a journal article. Prerequisites: CHEM 222 and any one of BIOL 231, 245, 246, 250, 391, or CHEM 205 or CHEM 309 (which can be taken as a co-requisite). Required for the biochemistry major and also carries credit toward the biology major/minor and the chemistry major/minor. Offered only in the spring semester. *Also offered as BIOL 394 and BIOCH 394.*

4000-4999. Special Topics in Chemistry.

The content of each course or section of these 300-level or 400-level special topics courses varies and will be announced each semester.

415. Advanced Biochemistry.

A variety of topics are covered in depth, depending on student interest. The course begins with an overview of metabolism and its hormonal regulation. Other topics may include protein synthesis and targeting, molecular immunology, sensory systems and neurotransmission, membrane transport, and photosynthesis. Through both written and oral presentation, students develop their abilities to use the scientific literature and communicate in science. Prerequisite: CHEM 309 or permission of instructor. Counts toward neuroscience major (cellular track). Taught every other year in the spring (in even years) *Also offered as BIOCH 415.*

451. Advanced Inorganic Chemistry Laboratory (0.5 unit)

Laboratory experiments emphasize the synthesis, characterization, and properties of inorganic compounds. The experiments include investigation of physical, thermodynamic and kinetic properties. Use of air-free synthesis techniques will include use of Schlenk lines and glove box. Products of inorganic synthesis will be characterized by a variety of techniques that include ultraviolet-visible, infrared and nuclear magnetic resonance spectroscopy. Advanced data analysis tools will be applied to experimental results. Written assignments develop rhetorical skills using chemical language, primary literature

sources, and practical data processing. Offered in the spring but not all years. Runs seven weeks. Prerequisite: CHEM 303 or permission of the instructor.

#### 452. Instrumental Analysis. (0.5 unit)

An advanced course emphasizing instrumentation in methods of chemical analysis. Principal instrumental methods examined include absorption and emission spectrometry, electroanalytical methods and chromatographic and other separation methods. Some introduction to analog and digital signal processing principles and computer-assisted data acquisition and processing is presented. Two lectures and two laboratories per week for one half of the fall semester. Pre-requisite CHEM 205 and co-requisite or Pre-requisite CHEM 341 (Quantum Chemistry) or CHEM 342 (Thermodynamics and Kinetics)

#### 489, 490. SYE: Research for Seniors. (0.5 or 1 unit of academic credit)

Student research is at the heart of the chemistry curriculum and culminates in a year-long senior project carried out in close collaboration with a faculty mentor. In special cases, it is possible to complete the SYE in one semester with the approval of the advisor and the chair. Examples of recently completed senior projects can be found at the department's Web page. For the senior project, students enroll each semester in Chemistry 489 or 490, for which they typically receive 0.5 credits each. Students undertaking the American Chemical Society certified degree option must enroll in 489 or 490 and complete a project that involves original laboratory research.

## Computer Science

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Major and minor offered under the auspices of the mathematics, computer science and statistics department. Visit the mathematics, computer science, and statistics department webpage at <https://www.stlawu.edu/offices/math-computer-science-and-statistics>.

### Major Requirements

The requirements for a major in computer science are 11 units, consisting of six foundational courses, four electives, and a senior-year experience.

#### Foundational Courses (six required)

CS 140. Introduction to Computer Programming.

CS 219. Techniques of Computer Science.

CS 220. Computer Organization.

CS 256. Data Structures.

CS 362. Algorithm Analysis

MATH 280. Bridge to Higher Mathematics.

### **Elective Courses (*any four*)**

Any 300-level CS course can count as an elective.

### **Senior-Year Experience (*one required*)**

This requirement is typically satisfied by taking a course designated as an SYE, such as CS 450, CS 489, or CS 498. However, a student with a second major may instead satisfy this requirement by taking an SYE course for that major. Finally, with the permission of the department chair, this requirement may be satisfied by taking an additional project-oriented CS elective or by completing an internship.

## **Honors**

Honors work in computer science provides the student with an opportunity for more independent and creative work in pure or applied computer science. A minimum GPA of 3.5 in the major is required to receive honors in computer science. In addition, each student applying for honors must complete a departmentally approved honors project. Interested students should consult the department chair.

## **Notes**

Computer science majors are encouraged to complete CS 220, CS 256, and Math 280 as soon as possible, ideally by the end of the sophomore year, because these courses are either required or recommended for several upper-level courses in the major.

Although only one mathematics course is required, computer science majors are strongly encouraged to consider other courses in mathematics and statistics, particularly if they are interested in pursuing graduate study.

Students planning to participate in an off-campus program should seek early advice from the department on the best way to plan their major program.

There are some restrictions on combinations of majors and minors within the department. Information on this can also be found on the department webpages at [www.stlawu.edu/math-computer-science-and-statistics](http://www.stlawu.edu/math-computer-science-and-statistics).

## **Minor Requirements**

Six courses are required for the minor in computer science: CS 140, CS 219, CS 220, CS 256, and two 300-level CS electives.

## **Advanced Placement**

Students who earn a 4 or 5 on AP Computer Science Principles will receive credit for CS 140. Students who earn a 4 or 5 on AP Computer Science A will receive credit for CS 219. Whether credited or not, CS140 requirements may be waived for students with sufficient programming background.

## Courses

### 140. Introduction to Computer Programming.

An introduction to programming using a high-level language. Assumes no prior knowledge of programming and focuses on essential skills. Students learn to create programs ranging from practical utilities to simple games.

### 219. Techniques of Computer Science.

An in-depth look at computing and programming in a high-level language. Introduces more advanced programming problems and more principled programming techniques. Prerequisite: CS 140 or the equivalent.

### 220. Computer Organization.

An in-depth look at the underlying organization and architecture of modern computer systems. Topics include data representation, the organization of CPUs including caches and the memory hierarchy, machine language, and an introduction to assembly language programming. Prerequisite: CS 219. Offered in spring semesters.

### 250. Computer Science Seminar.

Explores topics of interest beyond the core Computer Science curriculum. The course is worth 0.25 credit, meets once per week, and is graded pass/fail. As topics vary from one offering to the next, it is possible for students to repeat the course for credit. Prerequisite: may vary. Offered as scheduling allows.

### 256. Data Structures.

An in-depth look at the essential strategies for the organization, retrieval, and processing of data. Topics include arrays, lists, stacks, queues, maps, and trees, as well as an introduction to algorithm analysis. Prerequisite: CS 219.

### 302. Symbolic Logic.

A study of elementary symbolic logic. Topics include sentential and predicate logic. Prerequisite: MATH 280 or CS 220 or PHIL 202. Offered as scheduling allows. *Also offered as PHIL 302 and MATH 302.*

### 318. Graph Theory.

Deals with the study of a finite set of points connected by lines. Problems in such diverse areas as transportation networks, social networks and chemical bonds can be formulated and solved by the use of graph theory. Topics include theory, algorithms, applications, and history. Prerequisite: MATH 217 or MATH 280. Offered as scheduling allows. *Also offered as MATH 318.*

### 321. Computer Networking.

An overview of computer networking and the technologies behind the internet. Topics include protocols at the application level (HTTP, DNS, etc.), transport level (TCP/UDP), and network level (IP), as well as issues related to network security. Prerequisite: CS 256, with CS 220 strongly recommended. Offered as scheduling allows.

### 332. Web Programming.

Introduces the concepts and languages of modern web programming. Topics include HTML/CSS, client-side and server-side scripting, and interaction with a database. Prerequisite: CS 256. Offered as scheduling allows.

### 340. Software Engineering.

Examines the challenge of creating reliable, maintainable software in teams. Introduces modern tools and strategies for design, version control, testing, debugging, and documentation. Prerequisite: CS 256 with either CS 220 or Data 234 strongly recommended. Offered as scheduling allows.

### 345. Database Systems.

A look at how data is logically organized, physically stored on a digital device, and queried. Focuses primarily on relational database systems and structured queries. Other topics include non-relational data models, privacy, security, performance, and reliability. Prerequisite: CS 256 with either CS 220 or Data 234 strongly recommended. Offered in fall semesters. *Also offered as DATA 345.*

### 352. Statistical & Machine Learning

Introduces techniques for developing advanced models from datasets, for the purposes of better understanding the data and making predictions about future data. Techniques include linear and regularized regression, nearest neighbor classification, support vector machines, decision tree ensembles, and neural networks. Examines real-world applications, both successes and failures, the latter of which often involve data with embedded biases. Students will develop both technical and ethical competence in using some of the most powerful computational tools in data science. Prerequisites: STAT 213, CS 219, and MATH 217. Offered as scheduling allows. *Also offered as DATA 352 and STAT 352.*

### 362. Algorithm Analysis.

An investigation of core techniques for designing and analyzing algorithms for computational problem-solving. Introduces well-known algorithms for common types of problems and teaches students to evaluate algorithm efficiency. Prerequisites: MATH 280 and CS 256, with CS 220 strongly recommended. Offered in fall semesters.

364. Programming Languages.

Addresses several advanced topics in programming: the process of code interpretation, the principles behind the design of programming languages, and the paradigms of functional and concurrent programming. Prerequisite: CS 256, with CS 220 strongly recommended. Offered as scheduling allows.

370. Operating Systems.

An overview of operating system principles. Topics include process scheduling and synchronization, memory management including virtual memory, file system interfaces and implementations, and design considerations for desktop/mobile platforms. Prerequisite: CS 256, with CS 362 strongly recommended. Offered as scheduling allows.

374. Artificial Intelligence.

A programming-intensive introduction to the concepts and uses of artificial intelligence. Teaches students to implement agents for problem-solving, game-playing, and decision-making. Prerequisite: CS 256, with CS 220 strongly recommended. Offered as scheduling allows.

380. Theory of Computation

Addresses the theoretical basis of computer science. Introduces a hierarchy of computational models and the types of problems they can and cannot solve, as well as a set of problem complexity classes and their relationships. Prerequisite: MATH 280. Offered as scheduling allows. *Also offered as MATH 380.*

289, 389. Independent Study.

Permission required.

450. SYE: Senior Seminar

Permission required.

489. SYE: Senior Project for Majors.

Permission required.

498. SYE: Senior Honors Project for Majors.

Permission required.

## Conservation Biology

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Major offered.

Students majoring in Conservation Biology may not also double-major or minor in Biology or in the Biochemistry, Biomedical Sciences, Neuroscience, Biology-Physics, Biology–Environmental Studies combined major. First-year students considering a Conservation Biology major should seek early advisement from a faculty member and should begin the introductory courses required for the major in the first year.

More information on this multidisciplinary major can be found at <https://www.stlawu.edu/offices/conservation-biology>.

### Major Requirements

Conservation Biology majors must complete a predetermined set of courses (outlined below). Students should take BIOL 221 (Ecology with lab) as soon as possible following completion of BIOL 101 and BIOL 102. Students are strongly encouraged to complete some study outside of northeastern North America through study abroad, study at a biological field station, or through participation in certain courses with a travel component. Students may count up to two courses taken while abroad toward the requirements for the major as long as the courses meet major requirements.

### Required Courses

Full course descriptions can be found by visiting the *Catalog* section for the sponsoring department.

#### Core Courses

Students must take all of the following courses:

BIOL 101 and 102. General Biology

BIOL 221. General Ecology

BIOL 245. Genetics or BIOL 343 Evolution

BIOL 440. Conservation Biology (seniors only)

#### Social Science/Environmental Studies Electives

Students must take 2 of the following 6 courses from 2 different departments:

GS 101. Intro Political Economy

ENVS 101. Our Shared Environment

ECON 100. Intro. Economics

GOV 103. Intro. American Politics

GOV 105. Comparative Politics

GOV 108. Intro. International Relations

## Allied Science or Math Courses

Students must complete one of the following options:

- A. CHEM 103 **and** CHEM 104. General Chemistry (*both with lab*)
- B. STAT 113. Applied Statistics **and** GS 233. Geographic Information Systems w/ Lab
- C. Take two of the following Geology courses: GEOL 103. Dynamic Earth w/ Lab, GEOL 104. Historical Geology, GEOL 112. Global Climate w/ Lab, or GEOL 115. Oceanography
- D. Any two of the following Math, Computer Science and Statistics courses:
  - STAT 113. Applied Statistics
  - STAT 213. Applied Regression Analysis
  - MATH 135. Calculus I
  - MATH 136. Calculus II
  - CS 140. Intro. To Computer Programming
  - CS 219. Techniques of Computer Science

## Electives

Conservation Biology majors must complete an additional 6 electives, of which one must be an advanced ecology course, two must be organismal diversity courses (one about a non-animal taxonomic group) and one must be a global perspectives elective. The remaining two electives must be drawn from the advanced ecology group, the organismal diversity group or from a specified set of upper-level electives (see below). If the remaining two electives are both drawn from the specified set of upper-level electives, at least one of the two must be from the Biology department offerings. Approved courses are listed below. Students may petition the major coordinator to have other courses fulfill these electives. Students may count up to two courses taken while abroad toward the requirements for the major.

### Advanced ecology electives (one required):

- BIOL 330. Ecology of Lakes and Rivers (with lab)  
BIOL 357 Behavioral Ecology  
BIOL 380. Tropical Ecology

And certain special topics courses.

### Organismal Diversity electives (two required, one must be about a non-animal taxon and a maximum of two vertebrate courses will count toward the major):

- BIOL 209. Vertebrate Natural History (*with lab*)  
BIOL 215. Arthropods and Other Invertebrates (with lab)  
BIOL 218. Ornithology (*with lab*)  
BIOL 224. Biology of Plants (*with lab*)  
BIOL 227. Mammalogy (*with lab*)  
BIOL 231. Microbiology (*with lab*)  
BIOL 258. Ethnobotany (*with lab*)  
BIOL 319. Plant Systematics (*with lab*)

BIOL 325. Mycology (*with lab*)

GEOL 206. Paleontology

GEOL 217. Dinosaurs

And certain special topics courses.

**Other Upper-level electives:**

- BIOL 230. Food from the Sea (with lab)
- BIOL 242. Biodiversity Conservation and Management in East Africa (Kenya Semester Program)
- BIOL 260: Once and Future Oceans
- BIOL 489, 490, or 499. SYE Research. Maximum 1 unit counted toward major.
- ENVS 369. Ecological Restoration
- ENVS 370. Global Amphibian Decline
- ENVS 371. Landscape Ecology
- GEOL 340. Conservation Paleobiology

And certain special topics courses.

**Global Perspectives elective (one required).**

Global perspectives electives investigate the environment through a non-scientific, non-Western or non-North American lens.

- AFS 337. Cultural, Environment and Development in East Africa (Kenya Semester Program)
- ANTH 102. Cultural Anthropology
- ANTH 251. Humans and Other Animals
- ECON 236. Globalization Issues: Equity, the Environment and Economic Growth
- ECON 308. Environmental Economics
- ECON 384. Natural Resource Economics
- ENG 231. Adirondack Literature
- ENG 293. A Literary Harvest
- ENG 295. Nature and Environmental Writing
- ENG 334. Reading the Land: Pastoral and Georgic Literature
- ENG 346. American Literature and the Environment
- ENG 352. Contemporary Literature and the Environment
- ENVS 261. Sustainable Agriculture
- ENVS 263. Global Change and Sustainability
- GOV 343. Ecology and Political Thought
- GS 259. Global-local Environmentalisms
- GS 301. Theories of Global Political Economy
- GS 324. Global Public Goods: Exploring Solutions for the 21<sup>st</sup> Century
- GS 365. Rethinking Population, Health and Environment
- HIST 213. Global Environmental History
- PCA 334. Environmental Communication
- PHIL 310. Philosophy of the Environment
- REL 103. Religion and Ecology
- SOC 187. Environment and Society
- SOC 253. Race, Class and Environmental Justice

- SOC 269. Population and Natural Resources
- SOC 465. Environmental Sociology

And certain special topics courses.

Please see the Conservation Biology website for additional courses that will fulfill the Global Perspectives elective. Students may work with their advisor to petition for other courses to fulfill the global perspectives elective.

Students are encouraged to consider taking at least one semester of independent research with a faculty member and to study a foreign language, but doing so is not a requirement of the major.

## Independent Research

Students who wish to conduct independent research may do so by taking customized research methods courses (BIOL 381 and 382), or as seniors, by taking tutorial research courses (BIOL 468 and 469) or experimental and field research courses (BIOL 489 and 490). Students must discuss possible projects with members of the biology faculty. For more detail, see [www.stlawu.edu/conservation-biology](http://www.stlawu.edu/conservation-biology).

## Honors

To graduate with honors in Conservation Biology, a student must have a 3.5 major GPA and must satisfactorily complete a 2-unit, year-long honors research project. Students conducting honors projects enroll in 1.0 unit of independent research (BIOL 489) during the fall and 1.0 unit of honors research (BIOL 499) in the spring of the senior year. The project is supervised and finally approved by an honors committee comprised of the project advisor and two other faculty members. Students wishing to conduct an honors project should consult with potential project advisors by the end of the junior year.

## Data Science

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Major and minor offered under the auspices of the mathematics, computer science, and statistics department.

Visit the department webpage at [www.stlawu.edu/math-computer-science-and-statistics](http://www.stlawu.edu/math-computer-science-and-statistics).

## Major Requirements

### Foundational Courses

- MATH 135. Calculus I.
- MATH 136. Calculus II.
- CS 140. Introduction to Computer Programming.
- CS 219. Techniques of Computer Science.
- STAT 113. Applied Statistics.
- STAT 213. Applied Regression Analysis.

## Core Courses

- MATH 217. Linear Algebra.  
CS 256. Data Structures.  
CS 345. Database Systems.  
DATA 234. Foundations of Data Science.  
DATA 352. Statistical and Machine Learning.

## Electives

Choose three, at least one from Group 1.

### Group 1 (technical electives):

- MATH 205. Multivariable Calculus.  
MATH 230. Differential Equations.  
MATH 318. Graph Theory.  
CS 332. Web Programming.  
CS 340. Software Engineering.  
CS 362. Algorithm Analysis.  
CS 374. Artificial Intelligence.  
STAT 226. Statistical Methods of Data Collection.  
STAT 325. Probability.  
STAT 326. Mathematical Statistics.  
STAT 343. Time Series Analysis.

### Group 2 (applied electives):

- BIOL 303. Biostatistics.  
CHEM 205. Quantitative Analysis.  
CHEM 342. Thermodynamics and Kinetics.  
ECON 342. Econometrics.  
GEOL 233. Geographic Information Systems.  
GEOL 319. Hydrology and Hydrogeology.  
GEOL 333. Advanced Geographic Information Systems.  
GEOL 362. Geochemistry.  
ENVS 323. Environmental Epidemiology.  
ENVS 383. Energy Life Cycle Analysis.  
PCA 365. The Rhetoric of Algorithms.  
PHYS 221. Modern Physics I.

- PHYS 222. Modern Physics II.  
PSYC 205. Research Methods in Psychology.  
PSYC 401. Fundamentals of Learning.  
SOC 301. Quantitative Research Methods.

### **Capstone Experience (SYE)**

Choose One:

DATA 450: Applied Data Science Seminar

DATA 489/498: Independent/Honors SYE

A summer fellowship approved by the department chair

An internship approved by the department chair

## **Honors**

Honors work in data science provides the student with an opportunity for more independent and creative work. A minimum GPA of 3.5 in the major is required to receive honors in data science. In addition, each student applying for honors must complete a departmentally approved capstone. Interested students should consult the department chair.

## **Notes**

Students considering graduate work in Data Science or Statistics are strongly encouraged to take Math 205 and Stat 325.

Students planning to participate in an off-campus program should seek early advice from the department on the best way to plan their major program.

A worksheet for a stand-alone data science major can be found on the department webpages at [www.stlawu.edu/math-computer-science-and-statistics](http://www.stlawu.edu/math-computer-science-and-statistics). Furthermore, there are some restrictions on combinations of majors and minors within the department. Information on this can also be found on the department webpages.

## **Minor Requirements**

The requirements for a minor in data science are seven units, including six foundational courses and one elective.

### **Foundational Courses**

- CS 140. Introduction to Computer Programming.  
CS 219. Techniques of Computer Science.  
CS 256. Data Structures.

- STAT 113. Applied Statistics  
STAT 213. Applied Regression Analysis *or* ECON 342. Econometrics.  
DATA 234. Foundations of Data Science.

### Elective Courses

The following courses are pre-approved as electives. Other courses not listed here may count as electives if approved by the department chair.

- CS 332. Web Programming.  
CS 340. Software Engineering.  
CS 345. Database Systems.  
CS 362. Algorithm Analysis.  
CS 374. Artificial Intelligence.  
MATH 205. Multivariable Calculus.  
MATH 217. Linear Algebra.  
MATH 230. Differential Equations.  
MATH 318. Graph Theory.  
STAT 226. Statistical Methods of Data Collection.  
STAT 325. Probability.  
STAT 326. Mathematical Statistics.  
STAT 343. Time Series Analysis.

### Major/Minor Restrictions

Students majoring or minoring in Computer Science or Statistics may not also minor in Data Science. Students majoring or minoring in Mathematics may minor in Data Science, but at most two courses may count simultaneously towards both programs.

### Courses

234. Foundations of Data Science.

An introduction to fundamental data science concepts using modern statistical programming languages and software. The course assumes no prior knowledge of programming but a familiarity with basic statistics is required. The course focuses on building essential data science skills such as data manipulation and visualization, basics of programming, string manipulation, and modern data sources (such as web and databases). Emphasis will be placed on building skills applicable to large-scale projects. Students may receive credit for only one of DATA 234, STAT 234, STAT 3007, or STAT 201. This course fulfills the Computing Requirement of the Statistics Major. Prerequisite: STAT-113 or ECON-200.

### 345. Database Systems.

An introduction to fundamental data science concepts using modern statistical programming languages and software. The course assumes no prior knowledge of programming but a familiarity with basic statistics is required. The course focuses on building essential data science skills such as data manipulation and visualization, basics of programming, string manipulation, and modern data sources (such as web and databases). Emphasis will be placed on building skills applicable to large-scale projects. This course fulfills the Computing Requirement of the Statistics Major. Prerequisite: STAT 113 or ECON 200. Offered in fall semesters. *Also offered as CS 345.*

### 352. Statistical & Machine Learning

Introduces techniques for developing advanced models from datasets, for the purposes of better understanding the data and making predictions about future data. Techniques include linear and regularized regression, nearest neighbor classification, support vector machines, decision tree ensembles, and neural networks. Examines real-world applications, both successes and failures, the latter of which often involve data with embedded biases. Students will develop both technical and ethical competence in using some of the most powerful computational tools in data science. Prerequisites: STAT 213, CS 219, and MATH 217. Offered as scheduling allows. *Also offered as CS 352 and STAT 352.*

### 289, 389. Independent Study

Permission required.

### 450. SYE: Senior Seminar.

Permission required.

### 489. SYE: Senior Project for Majors.

Permission required.

### 498. SYE: Senior Honors Project for Majors.

Permission required.

## Digital Media & Film

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Major and minor offered.

Visit the Digital Media & Film department webpage at <https://www.stlawu.edu/offices/digital-media-film>.

### Major Requirements

The Digital Media & Film major consists of 12 courses in the categories listed below, plus an experiential component. For an updated list of production electives and film, media & society electives, including

those offered through other departments and programs, see <https://www.stlawu.edu/offices/digital-media-and-film/major-requirements>.

### **Foundation courses (3)**

- DMF 3099. Film & Media Action
- DMF 211. Introduction to Film Studies or DMF 251. History of Cinema or DMF 271. World Cinema
- GS 101. Introduction to Global Studies I: Political Economy or GS 102. Introduction to Global Studies II: Race, Culture, Identity or GNDR 103. Gender and Society or SOC 169. Media & Society or PCA 239. Media Industries

### **Production electives (2)**

Majors must complete at least 2 production courses from a selection of over twenty-five existing electives in filmmaking, photography, media art, graphic design, journalism, screenwriting, podcasting, acting, directing, set design, music composition, and recording arts.

### **Film, Media & Society electives (5)**

Majors must complete 5 courses in the analysis, theory, and critique of film and media in diverse cultural, historical, and political contexts. At least 2 must be taken at the 300/400 level.

### **Media Ethics (1)**

For their media ethics requirement majors must take 1 of the following pre-approved courses:

- DMF 311. Film Theory
- GS 302. Theories of Global Cultural Studies
- GNDR 369. Making Sexualities
- PCA 365. Rhetoric of Algorithms
- LANG 3021. Cross-Cultural Conversation & Mediation Through Media
- EDUC 3031. Critical Media Literacy

### **Capstone Project Seminar (1)**

Seniors in the major will complete a semester-long 1-course-credit project in critical media-making, which will be offered as a seminar format with potential for collaborative group projects. Potential for a year-long honors project with pre-approval.

- DMF 4029. Make/Collaborate: Media Capstone Project

### **Experiential Component**

Majors must complete one experiential component with possible options including:

- Internship: Weave News, NCPR, Hill News, Student Integrated Marketing Team (managed by University Communications), Brush Art Gallery, Esports, or approved off-campus internships
- Community-Based Learning course focused on media and/or film
- Research fellowship in film and/or media
- Study abroad with film or media component: NYC Program; Prague Film and Television School at the Academy of the Performing Arts (FAMU), or other approved study abroad programs

## Minor Requirements

The Digital Media & Film minor consists of 6 courses:

- One foundation course: DMF 211, 251 or 271.
- Five electives. At least one of these courses must satisfy the production requirement with DMF 3099 (Film & Media Action) included as an option.

For an updated list of approved electives, including those offered through other departments and programs, see <https://www.stlawu.edu/offices/digital-media-and-film/major-requirements>.

## Courses

211. Introduction to Film Studies.

This is the first course in a sequence that examines the structures, techniques, history and theory of film. Questions of history and theory are treated only in passing; the prime focus is on learning to identify, analyze and articulate what we see when we watch a film. The course studies the terminology used to describe film techniques and applies this terminology to the films viewed. The goal is to pass from close analysis of film technique and film construction to interpretation. Students learn not only how a film is constructed, but also how the techniques employed contribute to its values and meaning.

222. Documentary Filmmaking.

Students study style and technique in the documentary film and make a short documentary film. In looking at documentary films, the course discusses questions of truth and value as they come into play for filmmakers and filmgoers. In making documentary films, we consider how to collect and represent different truths and values.

234. Chinese Literature and Film.

This course provides an overview of Chinese literature and film. The first half surveys traditional Chinese literature with a focus on masterpieces in the golden ages of various genres. The second half introduces modern Chinese literature with a focus on film, including representative works by well-known writers Lu Xun and Ba Jin, and famous film directors such as Zhang Yimou, Chen Kaige, Wang Xiaoshuai and others. The aim is to enhance students' interests and skills in reading and analysis of Chinese literature and film, and improve students' understanding of the history, society and culture of China. All works are read in English translation. *Also offered as LTNT 234.*

239. Media Industries.

This course surveys the historical development of traditional media industries such as newspapers, magazines, books, television, radio, film, music recording and video games, as well as the issues related to the emergence of digital technologies epitomized by the Internet. It likewise focuses on the historical evolution of two other closely related fields—advertisement and public relations. *Also offered as PCA 239.*

244. Techniques of Screenwriting.

An introductory study of basic technical problems and formal concepts of screenwriting. The study of produced screenplays and formal film technique, along with writing scene exercises, builds toward construction of a short (50-minute) script. *Also offered as ENG 244 and PCA 244.*

251. History of Cinema.

This course examines the development of film technology and film technique from the 19th century to 1960, and the place of the new medium in the evolving cultural-social contexts of the 20th century. Subjects include early experiments in photography; the beginnings of narrative cinema; special effects; new camera dynamics; the development of cinema stars; theories of editing and montage; the introduction of sound; film aesthetics; deep focus photography and realism; and color photography. The course studies films by Lumière, Méliès, Eisenstein, Chaplin, Lang, Renoir, Rossellini, Welles, Truffaut and others. Movements and genres studied include German Expressionism, poetic realism, forms of comedy, film noir, Italian neo-realism and French New Wave.

262. Video Art.

In this course, students will gain foundational skills of four-dimensional (moving) imaging software and to create animated and video-based art works. Students will study a range of artists who use video, animation, installation and interactivity in their work, and experiment with the creation of these types of work. By the end of the semester students should have knowledge of industrial standards in editing and effect software, as well as having the ability create art with advanced video functionality. Prerequisite: AAH 131. *Also offered as AAH 262.*

269. Digital Media and Culture I.

A combination studio/seminar that explores the major theoretical issues surrounding the continually evolving culture of digital technology and the effects on various aspects of contemporary life including: aesthetics and perception, creative production, morality, contemporary art discourse, visual culture, entertainment, identity and other forms of social effects/affects. Studio projects will investigate the creative potentials of social media software, digital painting, photography, and video. Projects will respond conceptually to theoretical issues that are being discussed in class. An emphasis on individual voice, creativity, and methods of idea development will be encouraged throughout the term. Brainstorming and critique are common and will follow the Harkness Method of student-centered discussion and inquiry to help students learn to think critically, listen analytically, and interact respectfully. *Also offered as AAH 269.*

271. World Cinema.

This course complements DMF 251 by exploring the history of film outside Western Europe and the United States. Films for each semester are typically selected from four or five regions: recent regional emphases have included East Asia, South Asia, the Middle East, Eastern Europe, West Africa and Latin America. Along with developing skills in analyzing film, students read about the history of film in different countries, consider the ways directors fit into both local and global histories of cinema, and explore the social terrain upon which filmmakers work.

281. Music Video.

Music television created new ways of visualizing music, new ways of seeing sound. This course looks at the rise of music video in the 1980s, its predecessors and its influences. While we focus primarily on the history and criticism of music video, the course also contains a substantial production component that includes creating and editing sound and video files. Offered occasionally. *Also offered as MUS 281.*

282. New German Cinema.

Taught in English. This course introduces students to the cultural, political, and formal study of West German filmmaking since the 1960s in direct comparison with current popular cinema, East German film, and the lasting legacies of New German Cinema today. Topics include left-wing terrorism, feminist politics, immigration, colonialism, Germany's Nazi past, and Cold War divisions. Films by Herzog, Wenders, von Trotta, Fassbinder, Schlöndorff, Akin, Maccarone, Petzold, and others. This course may also be taken for German-language credit by completing select assignments in German. *Also offered as GER 282 and EUR 282.*

283. Berlin Hollywood.

Taught in English. Hollywood's fascination with modern German history is evident in the constant stream of films about the Holocaust, Nazism, and World War II. With the rise of Hitler, many German and Austrian directors, actors, and writers also fled Europe for southern California and helped shape the political, cultural, and stylistic direction of Hollywood. This course explores the intersection of German and American history and film culture from the 1930s to the present with a focus on World War II and covers key theories of modernism, mass culture, historical memory, and representations of the Holocaust. Films and texts by Lang, Riefenstahl, Chaplin, Wilder, Brecht, Adorno, Staudte, Spielberg, Verhoeven, Coen Brothers, and Tarantino. This course may also be taken for German-language credit by completing select assignments in German. *Also offered as GER 283.*

302. Theories of Global Cultural Studies.

An introduction to the growing field of cultural studies through examination of its major theoretical paradigms, particularly as these bear on the question of unequal global power relations. These may include Marxism, critical theory, post-structuralism, feminist theory and emerging work in postmodernism and post-colonial studies. Students explore strategies for "reading" cultural practices and texts not simply as reflections of reality, but as political interventions, expressions of desire, attempts to persuade and producers of power. Through a combination of theoretical criticism and analysis of specific materials, students prepare to undertake independent research with an informed understanding of how cultural studies challenge and enrich traditional social science and humanities approaches. Prerequisite: GS 101 or 102. Also may be counted toward the minors in Native American Studies and Peace Studies. *Also offered as GS 302.*

306. AW: Advanced Screenwriting Workshop.

An extension and intensification of ENG 244. Students are expected to work independently on the preparation of two feature-length screenplays. Workshop format emphasizes the revision and editing process. Prerequisite: ENG 244. *Also offered as PCA 306 and ENG 306.*

310. Culture & Media.

Print or electronic mediating technologies have accompanied humans for more than five centuries and at some point people started questioning the extent to which they influenced, or as we will learn to say, co-constructed our everyday reality. This class surveys some of the important intellectual contributions to this inquiry – media theories and seminal studies. At the same time, it follows some of the most significant contemporary debates that reflect the symbiotic relationship between the media and our own culture. *Also offered through Performance and Communication Arts.*

311. Film Theory.

This seminar offers a survey of film theory: its history, its important concepts and figures and its key theoretical movements. We begin with “classical” film theory, including auteur theory, realism, genre theory and political criticism. Much of the course, however, is given to contemporary film theory: semiotics, Marxism, psychoanalysis, feminism/masculinity studies, African American film studies, postmodernism, postcolonial and global studies. To ground all this theory, we view, discuss and write about an eclectic collection of films. Prerequisite: DMF 211, 251, or 271.

340. Blogging the Globe: News Analysis and Investigative Journalism.

This course fosters the tools necessary to be critical readers and viewers of the news in a complex, globalized media environment while also giving students the opportunity to become investigative journalists themselves. In addition to examining patterns in how global events are covered in mainstream and independent/alternative media outlets in the U.S. and elsewhere, the course explores deeper structural issues concerning discourse, ideology and the representation of “other” cultures; the relationship between media, corporate and state power; and the role of institutions in defining the bounds of “legitimate” knowledge. Students in the course contribute to The Weave, an online public Intellectual project, by researching and blogging about underreported stories. Prerequisite: GS 101 or 102. *Also offered as GS 340 and PCA 312.*

369. Digital Media and Culture II.

A continuation of Digital Media and Culture I. New and more complex software will be introduced. Students will be expected to spend time developing innovative and complex ideas and forms and advancing their vision(s) via digital media processes. This is a combination studio/seminar course and includes videos, readings and reflections, and written analyses. New visions of authorship will be encouraged as will continual encouragement to consider how one’s work could function in a socially transformative way. Brainstorming and critique are common, and will follow the Harkness Method of student-centered discussion and inquiry to help students learn to think critically, listen analytically, and interact respectfully. Depending upon student interest and experience, this course may be offered in conjunction with AAH 269 by instructor permission only. Prerequisites: AAH 131, 269. *Also offered as AAH 369.*

3050. Introduction to Filmmaking

This intensive hands-on course is designed to familiarize students with cinematic language and filmmaking technique and help them realize their vision on the screen. Through a series of collaborative assignments and exercises, students will employ a wide range of cinematic techniques designed to provide practical experience with filmmaking equipment including: camera, sound, lighting, and editing

software. These assignments will stress collaboration, pre-production planning, exploiting limited resources, mise-en-scene, and the application of postproduction techniques to create an aesthetic that serves the story or artistic intent.

#### 3099. Film & Media Action

This required introductory-level course for the new Digital Media & Film major engages students' interest in digital content creation, new media, social justice, and the desire to make positive change in the world. It grounds their beginning film- and media-making projects in considerations of the ethical and social implications of media dissemination and creation while attuning students to global histories of activist, resistant, and protest media and filmmaking.

#### 3107. Cinema, Technology & Social Change

This course examines the history of media infrastructures and social change via the cinematic lens offered by sci-fi, fantasy, and non-fiction genres in the 21st century. Changing media technologies have impacted our social worlds, altered how we communicate, and mediate how we engage in collective action. In this seminar, we will trace the past, present, and future of digital technologies, analyze changing representations in contemporary cinema, and revisit the theories and methodologies in the fields of digital media theory, networked movements, digital action, and critical Internet studies. Key issues to explore include: What is the infrastructure of the global Internet and who made it? What is the logic of networked action online and how effective is it? Have the supposed democratic rules of the Internet brought about positive social transformations? What is the impact of ever-increasing Internet surveillance? The aim is to learn about the role of digital technologies in emboldening democratic principles, as well as its use as a tool for strict governmental control via methods of total digital surveillance.

#### 4029. Make/Collaborate: Media Capstone Project.

Students in this required capstone seminar for the Digital Media & Film major will synthesize their skills, knowledge, and passions to contribute to the creation of a multi-faceted digital media project. Participants will hone skills in digital media production, project management, web design/publishing, and more while engaging in critical reflection of the various technologies involved and the responsibilities we have as digital content creators. All students will create a polished WordPress portfolio that both documents their ongoing work for the collaborative project and showcases their individual digital-media-and-film-related work. Open to seniors only.

## Economics

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Major and minor offered.

Visit the economics department webpage at <https://www.stlawu.edu/offices/economics>.

### Major Requirements

- 100. Introduction to Economics (1 unit)
- 200. Quantitative Methods (1.5 units)
- 251. Intermediate Microeconomic Theory. (1 unit)
- 252. Intermediate Macroeconomic Theory. (1 unit)

Five electives, at least four at the 300-400 level (5 units)

Majors must maintain a grade point average in economics of at least 2.0 and must earn a grade of at least 2.0 in both ECON 251 and 252. A grade of P (pass) in ECON 251 or 252 does not count as a 2.0. No more than one independent project or off-campus economics course may count toward the minimum number of economics courses required for a major or minor.

Students interested in majoring in economics should take ECON 100 (Introduction to Economics) as early as possible, preferably during their first year. Credit for ECON 100 is granted to students who earn a grade of 4 or 5 on the College Board's Advanced Placement Examinations in microeconomics or macroeconomics.

ECON 200 (Quantitative Methods in Economics) is a research methods course. It is recommended that this course be taken as early as possible, preferably before ECON 251 and 252. STAT 113 (Applied Statistics) is a prerequisite for ECON 200. Students who have completed Statistics 213 may choose not to take ECON 200 and instead choose an additional economics elective (at the 200- level or higher). ECON 200 may not be taken pass/fail.

ECON 251 (Intermediate Microeconomic Theory) and ECON 252 (Intermediate Macro-economic Theory) are economic theory courses required of all majors. Every 300 and 400-level course in economics has either ECON 251 or ECON 252 as a prerequisite. Potential majors are advised to take ECON 251 and ECON 252 during the sophomore year. First-year students can register for ECON 251 and ECON 252 by permission only. ECON 251 and 252 must be taken at St. Lawrence.

For transfer credit, a 200 level ECON elective must have a prerequisite of Econ 100; a 300 level Econ elective must have a prerequisite of either Econ 251 or 252.

Although ACCT 203 and 204 do not count toward the major in economics, it is strongly recommended that economics majors take one or both of these courses at some point during their time at St. Lawrence.

Students should work closely with their academic advisors to select courses for the major and those interested in graduate programs, especially graduate work in economics, should discuss their plans with their advisor as early as possible. Students interested in graduate study in economics are advised to pursue the economics–mathematics interdisciplinary major or to take as many courses in that major as possible. Students interested in graduate work in business are advised to take ACCT 203 and 204, CS 140 (Introduction to Computer Programming), MATH 135 (Calculus I) and ECON 313 (Financial Economics).

## Minor Requirements

- 100. Introduction to Economics. (1 unit)
- 251. Intermediate Microeconomic Theory. (1 unit)
- 252. Intermediate Macroeconomic Theory. (1 unit)
- STAT 113. Introduction to Statistics (1 unit)

Three electives, at least one at the 300-400 level (2.0 units)

Minors must maintain a grade point average in economics of at least 2.0. The economics minor may not be combined with a major in Business in the Liberal Arts.

## Honors

Department honors are awarded to students who have, upon graduation, at least a 3.5 average in economics courses and have successfully completed an honors project. Students who expect to pursue an honors project should consult with their advisor and the department chair as soon as possible in their junior year. Prospective honors students should also take ECON 342 (Econometrics) during their junior year (See also Honors in the Curriculum section of this *Catalog*.) Students pursuing Honors in Economics should register for ECON 495 in the fall and ECON 499 in the spring of their senior year.

## Courses

### Accounting

- 203. Financial Accounting.

An introduction to the basic financial accounting process, the underlying principles and the development and analysis of financial statements. Includes a weekly, computer-oriented laboratory session. Not open to first-year students.

- 204. Managerial Accounting.

An introduction to the accounting procedures and methods used for internal management purposes. Topics include cost accounting, differential analysis, responsibility accounting, budgeting and performance analysis. Prerequisite: ACCT 203. Not open to first-year students.

### Economics

- 100. Introduction to Economics.

A general introduction to the discipline of economics, including both microeconomics and macroeconomics. The course is designed to develop an understanding of how economic principles and analysis can be used to study social problems and issues. Topics include supply and demand, comparative advantage, inflation, unemployment, economic growth, money and the banking system. Applications and issues vary by section.

200. Quantitative Methods in Economics.

An introduction to mathematical and statistical techniques used in economic analysis. Topics include the representation of economic hypotheses, sources and uses of economic data, probability, hypothesis testing and regression analysis. Emphasis is on the application of statistical techniques to economic problems. Prerequisites: ECON 100 and STAT 113.

209. The Economics of Gender and Family.

This course examines ways basic economic theory has been applied to questions of gender. It explores a variety of empirical and historical evidence about the economic status of women, the division of labor in the household, contemporary changes in labor markets, the economic forces affecting the ongoing evolution of the American family and the effects of government policy on all these. The course may also discuss the role of economics, as well as its limits, in understanding social phenomena. Offered every other year. Prerequisite: ECON 100.

236. Globalization Issues: Equity, the Environment and Economic Growth.

Do globalization and economic growth contribute to increased inequality within countries and among them? Under what circumstances do global market forces contribute to the impoverishment of already disadvantaged nations and to the benefit of the already advantaged? What is the relationship between economic growth and damage to environmental resources? Under what circumstances do global market forces contribute to the degradation of the environment? This course endeavors to answer these questions and more, beginning with a study of recent literature by professional economists as well as by examining other data and evidence. Offered occasionally. Prerequisite: ECON 100. *Also offered through Peace Studies.*

251. Intermediate Microeconomic Theory.

Expands upon basic models of supply and demand, consumer theory, the theory of the firm and production, and theories of market behavior learned in Introduction to Economics. Examines the role of prices in the allocation of resources and examines the effects of changes in policy on economic choices. Prerequisite: ECON 100.

252. Intermediate Macroeconomic Theory.

A study of economic aggregates, including the determination of national income, employment and the price level, the topics covered include inflation, unemployment, economic growth, international macroeconomics and the appropriateness and effectiveness of monetary and fiscal policies. Prerequisite: ECON 100.

289, 290. Independent Project.

Individual study of a topic under the supervision of a faculty member. Prerequisites: GPA of at least 3.0 in economics and permission of instructor.

### 305. Industrial Organization.

This course examines the strategic choices made by firms in markets characterized by imperfect competition. Emphasis is placed on the use of theoretical models to understand the incentives a firm confronts in strategic environments. Topics include monopolization and market power, price discrimination, strategic interaction, collusion, product differentiation and other contemporary problems. Prerequisite: ECON 251.

### 307. Law and Economics.

This course analyzes the law using economic principles. In particular, it employs the techniques of microeconomic theory in the study of policy issues and legal rules. Topics such as property rights, externalities, contract law, tort law (accidents), product liability and criminal adjudication are critiqued in terms of how different incentive structures motivate economic actors. The course includes the study of how economic goals conflict with and complement other goals of the law, such as justice and fairness. Prerequisite: ECON 251.

### 308. Environmental Economics.

An analysis of deficiencies of the market system and existing property rights structure that generates pollution problems. This course applies the theories of externalities, public goods, the second-best, nonmarket valuation, and benefit-cost analysis to environmental policy and regulation. Alternate policy options are considered, including command-and-control and incentive-based approaches. This course discusses local environmental quality issues (such as the management of municipal and toxic waste) and global problems (such as ozone depletion and climate change that require international policy). Students learn tools of economic analysis and their application to environmental issues and problems. Prerequisite: ECON 251.

### 309. Labor Economics.

A study of labor markets and the role they play in the determination of wages, employment and working conditions. The demand for labor by employers, leisure-labor supply decisions by households, investment in human capital, distribution of earnings among individuals and the effects of labor unions are discussed. Topics covered may include analysis of the role of government policy in the areas of income maintenance, unemployment, education, and occupational health and safety. Prerequisites: ECON 200 and 251.

### 311. Money and Banking.

This course explores the roles of money, banks and government policy in promoting economic growth and stability in a modern economy. In particular, the course investigates the operational principles of modern banks and the Federal Reserve System and compares their strengths and weaknesses to other historical and theoretical banking systems. The course focuses on the effects of monetary institutions and policy on macroeconomic stability, including inflation and business cycles. Other topics may include the history of American banking, current issues in bank regulation, electronic money, the role of financial markets and international monetary economics. Prerequisite: ECON 252.

313. Investments (formerly Financial Economics, now listed as FIN 313)

This course is a standard course in investments. Among the subjects to be covered are the role of financial intermediaries and financial instruments, the time value of money, bond valuation, stock valuation, risk and return, market efficiency and investment companies. Special attention is devoted to hedge funds, options and futures. Prerequisites: ECON 251 and 252.

315. Public Sector Economics.

This course uses microeconomic tools and theory to examine the efficiency of markets and to enumerate potential roles for government when markets fail. The efficiency and equity of government expenditures and tax policies are examined by looking at their impact on individual behavior and the distribution of income. Current policies of state, local and federal governments are examined to see how real-world complications (like politics and information problems) can lead to outcomes that are very different from economic prescriptions. Prerequisites: ECON 200 and 251.

322. International Economics.

This course focuses on the theory of international trade and finance and its application to current policy problems such as protection, intervention in foreign exchange markets, international debt and foreign investment. Prerequisites: ECON 251 and 252 or permission of instructor. *Also offered through European Studies.*

333. Austrian Economics.

An introduction to the body of ideas known as the Austrian School of economics, which is associated with the work of Ludwig von Mises and F. A. Hayek. The course explores the history of the school and how its approach to economics compares with the neoclassical orthodoxy, covering topics such as: the nature of human action, the role of knowledge in the market, the process of economic calculation, competition as a discovery process, the Austrian theory of the business cycle, the problems of socialism and regulation, and the Hayekian critique of social justice. Offered every other year. Prerequisites: ECON 251 and 252.

336. Economic Development.

This course examines the problems of economic growth and development in the less developed countries (LDCs) of Asia, Africa and Latin America. Although a variety of approaches to development economics are studied, the analysis of new institutionalist economics is emphasized. By the end of the semester, participants should be able to understand (1) the economic diversity, as well as the diversity of development problems, among LDCs, (2) the conditions necessary or conducive to economic growth and the institutional hindrances to growth, and (3) the economic implications of alternative development strategies and policies. Prerequisites: ECON 200, 251 and 252. *Also offered through African Studies.*

342. Econometrics.

A study of statistical techniques economists has been found useful in analyzing economic data, estimating relationships among economic variables and testing economic theories. Topics include multiple regression, probit and logit analysis, heteroscedasticity, autocorrelation and simultaneous equations models. Prerequisites: ECON 200, 251 and 252 and MATH 135. *Also offered as STAT 342.*

344. Mathematical Economics.

A systematic study of the mathematical structure of economic theory, with emphasis on the application of calculus and linear algebra to economic analysis. Topics include optimization theory, comparative statics analysis of market and macroeconomic models, general equilibrium analysis and game theory. Prerequisites: ECON 251, 252, MATH 205 and 217. *Also offered through Mathematics.*

384. The Economics of Sustainability and Natural Resources.

This course complements Economics 308 (Environmental Economics). Standard economic approaches to problems of economic and ecological sustainability and natural resources are presented and criticized from a variety of different perspectives to give students a deeper appreciation of the role of economic analysis in achieving sustainable futures in the context of natural resource scarcity. Specific topics may include economics and population growth, economics and environmental ethics, economics of energy, materials, water and marine resources. Prerequisites: ECON 251.

389, 390. Independent Project.

Individual study of a topic under the supervision of a faculty member. Prerequisites: GPA of at least 3.0 in economics and approval by the department.

410/411. Federal Reserve Challenge I and II. (ECON 410 is 1 unit/ ECON 411 is 0.5 unit)

This course prepares students to compete in the Fed Challenge, a competition sponsored by the Federal Reserve System, in which teams from participating schools present monetary-policy analyses to a panel of judges at regional Federal Reserve Banks and regional winners advance to a national competition in Washington, D.C. It is an excellent opportunity for students to develop professional skills such as strong knowledge of macroeconomic and financial data, solid command of software to create charts and presentation materials, and extensive practice of oral communication skills. Prerequisites: ECON 100 and permission of the instructor.

450. SYE: Senior Seminar.

The purpose of the seminar is to provide an integrative experience for senior majors that will allow them to use what they have learned in previous courses to study a particular issue in economics. Writing, speaking and research skills are emphasized. The issues and topics that form the basis of the seminar vary by semester and instructor. Prerequisites: ECON 200, 251 and 252, and senior standing. Course descriptions will be provided to majors in the spring of their junior year.

489, 490. SYE: Senior Independent Research.

Individual study, under the supervision of a faculty member, who provides an integrative experience for senior majors, allowing them to use what they have learned in previous courses to study a particular topic in economics. Majors choosing this option for their SYE in the fall are encouraged to enroll in ECON 495. Prerequisites: ECON 200, 251, 252, senior standing, GPA of at least 3.0 in economics and approval of the department prior to the semester the project begins.

495. Senior Honors Seminar.

Designed to prepare senior majors who are eligible for departmental honors, this seminar is focused on enhancing capabilities in conducting scholarly work in economics. The seminar is offered in the fall of each academic year, and it is presumed that students enrolled plan to complete an honors thesis during the spring semester. Prerequisites: GPA of at least 3.5 in economics and approval of the department chair for those pursuing Honors.

498-499. SYE: Honors.

These courses are for senior majors who are eligible for department honors. Each student plans and writes an honors thesis under the guidance and supervision of a faculty member. Prerequisites: GPA of at least 3.5 in economics and approval of the department. Students must enroll in Economics 495 in the fall of their senior year.

## Economics–Mathematics

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Major offered.

More information on this interdisciplinary major can be found at <https://www.stlawu.edu/offices/economics/requirements-mathematics-economics-combined-major>.

The disciplines of economics and mathematics are closely related in many respects. Economics has relied heavily on mathematical analysis in the development of economic theory, while mathematics has provided solutions to optimization and control problems posed by economists. Economists have also used modern statistical techniques to test their theories, and statisticians have developed procedures appropriate for analyzing economic data. The interdisciplinary major in economics–mathematics gives students an opportunity to explore the relationship between these disciplines through a highly structured program of study.

The objectives of the interdisciplinary major are:

1. To provide students whose primary interest is economics an opportunity to study economic theory and applied economics more thoroughly and more rigorously than is possible in the usual curriculum.
2. To introduce important areas of economics, and applications of mathematics and statistics to students whose primary interest is mathematics.
3. To provide a background for students interested in graduate study in economics, applied mathematics, statistics, and management science.

4. To provide training in mathematics, statistics, and econometrics for those entering directly into employment upon graduation.

## Major Requirements

### Economics

- 100. Introduction to Economics.\* (1 unit)
  - 251. Intermediate Microeconomic Theory.\*\* (1 unit)
  - 252. Intermediate Macroeconomic Theory.\*\* (1 unit)
  - 342. Econometrics (also offered as STAT 342) (1 unit)
  - 344. Mathematical Economics. (1 unit)
- Three electives, at least two at the 300-400 level (3 units)

### Mathematics

- 135. Calculus I.\* (1 unit)
  - 136. Calculus II.\* (1 unit)
  - 205. Multivariable Calculus. (1 unit)
  - 217. Linear Algebra. (1 unit)
  - 325. Probability (also offered as STAT 325). (1 unit)
- Two electives at the 300-400 level or MATH 280 (2 units)

\*These courses may be omitted with advanced placement credit or other advanced standing. Students considering graduate work in economics are strongly encouraged to take MATH 280 and MATH 305.

\*\*ECON 251 and 252 must be passed with a grad of 2.0 or higher.

### Statistics

- 326. Mathematical Statistics *or* 343. Time Series Analysis. (1 unit)

## Honors

Honors in the interdisciplinary major are awarded in accordance with University policy on department honors (see Honors in the Curriculum chapter of this Catalog). Students may earn honors in economics-mathematics combined by completing an honors project in either department. Students interested in the economics-mathematics interdisciplinary major should consult the chair in either the economics or mathematics department.

## Education

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Minor offered (educational studies minor).

Visit the education department's webpage at <https://www.stlawu.edu/offices/education>.

The educational studies minor will be of interest to students who wish to explore issues in education and want to apply and expand what they learn in their major field of study and other coursework by placing it in conversation with the worlds of educational research, policy and practice. The minor prepares students for a diversity of rewarding postgraduate opportunities. Recent educational studies graduates have attained jobs in educational policy or higher education administration and worked at educational nonprofits and museums. By minoring in educational studies students are in a position to: begin teaching at independent schools; attain teaching fellowships that lead to teacher certification; seek careers in education-related fields, such as educational policy, educational nonprofits, and corporate training; apply to leading graduate schools of education; and seek post-baccalaureate certification to become a public school teacher or school leader.

### Educational Studies Minor

The educational studies minor consists of any five courses in education. Up to one course from another department that closely relates to education (e.g. Sociology of Education, Gender in Schools, TESOL, and others) or pre-approved study abroad courses in education may also be used towards the five courses. Students may be admitted for the minor in education at any time during the sophomore year or later, providing they have good academic standing at the University. A 2.0 grade point average is required in the minor for graduation.

### Courses

153. Introduction to Teaching.

This course is intended for students who do not plan to become certified teachers. It is an introduction to curriculum design, assessment, and practices that support student engagement. The course is ideal for students considering teaching in private schools, non-school environments (libraries, museums, outdoor education programs) and considering programs like Teacher For America. Through a combination of readings, lesson planning exercises and multiple reflections on teaching and the type of teacher students would like to become, the course will serve as excellent preparation for teaching in a variety of contexts.

173. Childhood and the Education of Children.

This course will explore: philosophy of and for children; literature written for children and about childhood; and books on early childhood education and policy. A guiding assumption of our exploration is that philosophical attentiveness to children and their educations can teach us a great deal about what we should hope for from educational reform, and what it means to be an educated person. The course does not have prerequisites, but it is reading intensive and students will be expected to develop a final project that blends themes from the course with their own interests.

203. Contemporary Issues in American Education.

This course introduces students to the range of current and critical issues in American education. In this course, we will consider how political, ideological, social and cultural forces shape schooling. Through class discussions, assignments, and other class activities, students will explore current, overarching questions in education including: What is the purpose of schooling? Who benefits/suffers from these purported ideals and goals? Are schools designed to equalize society? Or do schools further reproduce societal norms and social class? Should schools play a role in challenging the status quo? How are social constructs such as race, class, and gender reproduced in the classroom? How do capitalism, globalization, and democracy play out in education? Further, what is the teacher's role and responsibility for educating students within the political and historical context of schooling in America?

225. Rhetoric and Community Peer Mentors.

This course is designed to train students who will work as rhetoric and communication mentors in the University's WORD Studio. Permission of instructor required. Fulfills ARTS Distribution (2013 curriculum).

253. Contemporary Educational Policy.

When one looks at the landscape of educational reform, one is tempted to compare it to the classic Western film *The Good, the Bad and the Ugly*. There have been visionaries and opportunists, and sometimes it is hard to tell the difference between the two. Sadly, we often forgot that in the rush to reform schools, the biggest casualties are often those most at risk: students. In this course we will look at attempts to reform education, and—in the process—question whether it is the system that is most in need of reform or the reformer mindset. This is not to say that the status quo is necessarily acceptable or desirable. But it is to say that maybe we are looking for improvement in all the wrong places. We will do a range of readings in educational philosophy, educational theory and educational policy, with the goal that each student will create a final project aimed at responding to questions related to education reform and educational reformers.

273. Teaching and Teachers.

The main goal of this course is to ask two related questions. What is good teaching? Can good teaching be taught? Using a variety of sources—novels, film, educational research, journalism, autobiography—we will think together about the complexities of teaching and the variety of (often conflicting) visions of what good teaching is. By the end of the semester, you will develop a vision (or visions) of what good teaching looks like, and you will determine if—and possibly how—it can be taught.

309. Feminist Learning Theories

This course, multi-listed with the Education and Philosophy departments, is an interdisciplinary examination of three complementary theoretical approaches: feminist philosophy, feminist epistemology, and feminist pedagogy. Together we will ask how minority perspectives on the world such as those defined by critical theory, gender, (dis)ability, intersectionality, indigenous ways of knowing, and postmodernist theory demand new methods of learning and teaching in the 21st century. Course readings will come from book and article selections by Deloria, hooks, Freire, and Wilshire among

others. Pre-requisites, one of the following: Intro to Philosophy, education course, or gender studies course.

### 325. Sexuality Education.

The field of sexuality education can be examined through various disciplinary lenses, including but not limited to, law, medicine, journalism, religion, literature, and sociology. As such, this course will look at an array of sources, both scholarly and popular, to make sense of debates in the field. Students will deeply engage with issues of disability, heteronormativity, stigma, patriarchy, and morality, as they relate to sexuality education, from a variety of perspectives. Sexuality education is more than just learning about our body's biological and anatomical systems; there are deep historical, social, and cultural factors that influence this area of public health. Issues of diversity, equity, and positionality have profound effects on who is included and excluded from conversations about sexuality education. This course will push back on the status quo of sexuality education that has long excluded marginalized groups (e.g., the LGBTQ community, women, people with disabilities) in harmful, dehumanizing ways.

### 353. American Philosophies of Education.

This course will examine how American thinkers and writers describe the struggle to become an educated person. The authors that we will read together this semester all come to a point where they ask: Why does the world seem to conspire against individuals who aim to become educated? Each of our authors sees the struggle for education in different ways, describing it as a struggle: against the old (world); against our self and our self-conceptions; against injustice; against our language; against our forms of thinking and ways of knowing; against racism and other forms of prejudice; against our limitations (real and perceived). Together we will witness the struggles for education that our authors manage to (beautifully) express, and we will work together to discover what lessons these expressions hold for our understanding of education and our own struggles to become educated.

### 408. Critical Aspects of Teaching ESOL.

This course will critically examine the ESL teach-abroad phenomenon and while not a teaching certification course, students will leave this course with a fundamental understanding of and practical applications for teaching ESL/EFL. This course will examine trends and issues in the field of TESOL, will practice writing and teaching lesson plans, and will highlight the importance of understanding culture, learner characteristics, and situational information in planning and teaching. Students will also gain practical experience teaching English. Students will develop an understanding of the complexities of teaching ESL/EFL and why being a native English speaker is not enough of a qualification for success. Fulfills DIV13 (diversity) requirement. Dual listed as LANG 408, ESL 408 and AFS 408.

## Graduate Programs

Since fall semester 2021, St. Lawrence has offered a Master of Arts in Leadership degree program only. Graduates of St. Lawrence interested in applying to the available master's program should check requirements and deadlines in the graduate catalog.

Undergraduate students who have three or fewer units to complete before graduation may enroll in graduate courses with the permission of the instructor. However, graduate course titles can be taken for graduate credit only. If undergraduates who qualify to enroll wish to take a graduate offering for credit toward their undergraduate degree, a new 400-level course title and separate syllabus must be created by the instructor. Due to the extra work involved, creating a new course is only under the advisement and discretion of the course instructor.

## English

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Majors and minors offered.

Visit the English department webpage at <https://www.stlawu.edu/offices/english>.

### Major Requirements

#### The English Major in Literary Studies

A minimum of 10 semester units in English:\*

1. Five courses at the 100, 200, or 3000 level, to include ENG 250 and EITHER ENG 222, 225, 226, 230, 231, 237, or 238; three other introductory courses (one of which may be in creative writing).
2. Five courses at the 300, 400, or 4000 level. One of these five courses must be a Senior Seminar (ENG 450), and no more than one may be in creative writing.

#### The English Major in Creative Writing

A minimum of 10 semester units in English:\*

1. Five courses at the 100, 200, or 3000 level, to include ENG 250 (Methods of Critical Analysis), EITHER ENG 222, 225, 226, 230, 231, 237, or 238, and two introductory creative writing courses (201, 241, 242, 243, 244, 293, or 295).
2. Five courses at the 300, 400, or 4000 level. These five courses must include a Senior Seminar (ENG 450), at least two 300, 400, or 4000 level creative writing courses, and at least two 300, 400, or 4000 level literature courses.

\*Students may take more than the minimum of 10 courses in English. However, no more than 14 units in a single department will receive credit toward graduation.

### Minor Requirements

The English department offers two ways to minor in English, each one consisting of a group of six courses.

1. The English minor in literary studies requires ENG 250 (Methods of Critical Analysis); two literature courses at the 200 or 3000 level; and three literature courses at the 300, 400, or 4000 level.

2. The English minor in creative writing requires ENG 250 (Methods of Critical Analysis); one literature course at the 200 or 3000 level; one literature course at the 300, 400, or 4000 level; and three writing courses, one of which must be at the 300, 400, or 4000 level.

## Environmental Studies–English Major

A combined environmental studies–English major is available. Please consult the Environmental Studies section of this *Catalog* for the complete list of courses.

### Courses

124. Introduction to Poetry.

Does poetry tend to baffle you, although you know there's something enticing about it that you'd like to understand better? Or have you enjoyed poetry before and would like to learn more about it? This is the course for you. We will explore many of the ways poets make art out of language, including the visual vistas, soundscapes, and mind-opening ideas that poems can give to their readers. Occasionally we'll try out some of their creative techniques ourselves, but our consistent focus will be on appreciation and enjoyment. No seniors.

125. Introduction to Dramatic Scripts.

Students are introduced to the formal aspects of play texts and develop the critical skills necessary to read plays and critique live and video performances. Representative dramas from the Greeks to the present are investigated in terms of character development, dialog, settings and central ideas, as well as their original theatrical contexts: theater architecture, stage conventions, scenic devices, costuming, and acting techniques. The emphasis is on analysis of scripts and the relationship among performance conditions, cultural context and dramatic conventions. *Also offered as PCA 125.*

152. Introduction to Greek & Roman Mythology.

Do you know who the Olympian gods are, who recovered the golden fleece, or who founded Rome? Or maybe you've heard the names Athena, Hercules, and Aeneas, but aren't quite sure what they did? In this course we'll learn about the mythology of ancient Greece and Rome, starting with how the world was created out of chaos and ending with the founding of one of the most impressive empires in history: Rome. In between, we'll get to know who the gods and heroes from Antiquity are and learn about the stories that record their deeds of fame. Readings will include epics focusing on the exploits of heroes such as *The Aeneid* and *The Works and Days* as well as poems like *The Theogony* and the *Homeric Hymns* that preserve the actions of gods like Zeus, Hera, Aphrodite, and Apollo. No seniors.

190. Introduction to Literary Forms.

In this course, students will be introduced to the concept of literary genres. Each section focuses on a single genre—poetry, fiction, fairy tales, nature writing, graphic novels—with a view to describing and illustrating its major characteristics. We will explore the varieties within generic types, and our selections will be drawn from a wide historical range. As we study the particular literary form, students

will also learn to respond critically to the challenges posed by literary texts and receive guidance in the composition of effective written responses to them. Topics vary according to instructor and semester. No seniors.

3,000-3,999. Special Studies in Language and Literature.

The content of each course or section of these introductory special topics courses is different and is announced in the *Class Schedule*. Open to all students.

200. Sophomore Seminar.

The Sophomore Seminar is a seminar on the enduring value of literature—why we read it, how it brings us pleasure, and how it makes us better people. It examines how literature enables us to imagine new possibilities for ourselves and our world, and how it helps us to connect with ideas we have never considered. It is a seminar that emphasizes the value of literature in a liberal arts education. Topics will vary according to instructor and semester. Sophomores only.

201. Journalism.

A general study of journalistic principles and methods, as well as extensive practice in the gathering and writing of news. In the first half of the semester, students learn to analyze and compose basic types of stories in a style particular to new media, with an emphasis on accuracy, clarity and efficiency. In the second half of the semester, students practice and refine their reporting skills in an atmosphere closely resembling the conditions of a modern newsroom. They cover actual events of local, state, national and international importance as they unfold in real time—all under the pressure of real deadlines.

209. Internships in Sports Writing.

This internship course is designed for students who are interested in gaining real-world experience writing about sports. Students will learn how to track statistics while covering a game, write game stories and feature stories, and will cap the semester with an in-depth piece that explores an issue that affects collegiate student-athletes here at St. Lawrence. Reading assignments will be primarily from *The Athletic* and *The Best American Sports Writing* series, and exemplary student work may be featured on the Saints Athletics website. The small-group setting allows for intensive peer group review and students should expect to participate in a collaborative editing process. The internship counts as a creative writing course and is completed in addition to the five courses required for the introductory level of the major.

212. The London Stage.

Offered by St. Lawrence's program in England. Students read, view and discuss plays being produced in London during the semester. The formal study of the plays and their productions is supplemented by frequent attendance at various forms of theatre and occasional tours and lectures. Students with some background in drama may petition to take this course as 312L and substitute an independent project for the regular course work (*see below*).

215. Dramatic Texts in Context.

This course takes a sustained look at the theatrical and cultural contexts of plays that enable theatre practitioners to make informed choices regarding how to stage them. Topics for the course may be organized through time period – Greek and Roman drama, medieval English drama, contemporary American drama, for instance – or through thematic content: plays across time periods that foreground questions of identity formation, gender, sexuality, religion, class, or politics. Students should expect significant performance work in this class; however, no previous acting experience is required. *Also listed as PCA 215.*

222. Introduction to Multi-Ethnic American Literature.

This course introduces students to a broad range of literary arts crafted by racial minorities in the U.S. during the last two centuries. The main questions of early ethnic literature revolve around what it means to be a first- and second-generation American: how might we assimilate to this new and exciting country and how can we enrich it? More contemporary authors ask why and how race continues to define the self and how the current generation relates to ethnic traditions that might seem distant. As we read novels, poems, non-fiction, and drama, we will explore this set of questions as well as how the answers might change according to the intersections of gender, sexuality, class, ethnicity, and immigration. This survey course will enable us to glimpse into the experiences and histories of different racial groups: African Americans, Asian Americans, Latinx Americans, and Indigenous Peoples. Fulfills the DIV13 requirement.

223. Playwriting.

This course explores the processes of composition characteristic of the playwright. In a series of weekly assignments, various aspects of the art are introduced: dialogue, characterization, dramatic action, and others. The course concludes with the writing of a one-act play. Students read exemplary plays from the modern repertoire. *Also offered as PCA 223.*

225. Survey of English Literature I.

In this course, students will learn about the history of British literature from the 8th through the 17th centuries. The course invites students to explore developments in British literature through the lens of history and its relation to the development of the concept of the individual as well as competing philosophies of religious, political, and social life. Within this context, the course traces literary movements and the evolution of literary forms. It features a variety of drama, poetry, and some fiction and nonfiction from writers whose gender, class, and cultural outlook vary widely from historical era to era. Some of the texts we read are by famous authors like Chaucer, Shakespeare, or Milton; others are composed by less well-known and even anonymous authors. Some of the texts we read are in languages other than English, so we'll read those in translation, with the exception of Chaucer, whom we'll discover in his original middle English; others employ syntax that, though the same as our modern English, differs in exciting and beautiful ways. With each new text, students will gain a deeper appreciation of the volume, breadth, and variety of written work created in the British archipelago from the Medieval Period to the Restoration. Students contemplating graduate study in English are strongly recommended to take this course. *Also offered through European Studies.*

226. Survey of English Literature II. In this course, students will learn about the history of British literature starting at about 1700 and extending into the twentieth century and beyond. The course invites students to explore developments in British literature through the lens of history and its relation to competing philosophies of political and social life. Within this context, the course traces literary movements and the evolution of literary forms. It features a variety of fiction, nonfiction, drama, and poetry from writers of different social classes, genders, and cultural traditions. Some of the texts we read are by famous authors like Jane Austen or T. S. Eliot; others are composed by less well-known authors. Students contemplating graduate study in English are strongly recommended to take this course. *Also offered through European Studies.*

228. Irish Literature.

A cultural studies course on 20th-century Ireland, with a focus on literature. Literary texts are contextualized by cinematic and musical sources, history and politics. The course examines the ways literature from the early 20th century and the contemporary period has been used to create and represent the postcolonial nation of Ireland, what stories it tells about history, identity and nationhood. Attention is paid to the vexed relationship between the Irish nation/culture/people and the divided politics that occupy the island today. Authors include Yeats, Joyce, Lady Gregory, Synge, O'Casey, Friel, Nuala O'Faolain, Edna O'Brien, Heaney, Muldoon, Doyle and others. *Also offered through European Studies.*

230. Introduction to African American Literature

Beginning with the voices of poet Phillis Wheatley and abolitionist Sojourner Truth and the slave narratives of Frederick Douglass and Harriet Jacobs, the course traces the vast expressions of the black experience through poetry, political writings and speeches, autobiography, fiction, drama, sermons, and music into the present. The course asks students to connect history and literature to gain an understanding of the black experience and black literary innovations. Writers might include W.E.B. Du Bois, Ida B. Wells, Zora Neale Hurston, Richard Wright, James Baldwin, Audre Lorde, Malcolm X, and Toni Morrison. Fulfills the DIV13 requirement. *Also offered through African American Studies.*

231. Adirondack Literature

This course explores the literary history of the Adirondacks in an effort to understand how natural and cultural forces have shaped a sense of place in this storied geographic region. We'll examine a series of colonial encounters between Euro-American and Native American peoples; we'll study the cult of wilderness and conservation movements that inspired the creation of the Adirondack Park; and we'll read some works of historical fiction set in the region. Along the way, we'll ask the following questions: How have different people, over the past three centuries, imagined this natural and cultural landscape? How have they exploited, defined, and defended the Adirondack wilds? And what lessons for the future—environmental, social, or otherwise—can we draw from our study of this particular region? Fulfills the EL requirement.

### 237. Survey of American Literature I.

In this course, we'll study a variety of American literature written between the founding of the Jamestown colony and the U.S. Civil War. Historically, these two events book-end a dramatic period of cultural contact, political conflict, scientific enlightenment, and artistic production in the transatlantic world. To give shape to our survey of American literature, we'll focus on a few key themes—colonialism, race and slavery, and gender politics—and consider how these issues shaped literary expression in this era. We'll revisit some famous “American” legends, encounter the major thinkers of the “American Enlightenment,” and read works by the canonical writers of the “American Renaissance.” We'll also discuss how writers from different backgrounds invoked the idea of “America,” how they represented the “American” project, how (or if) a distinctly “American” literature emerged, and why the notion of “America” continues to carry so much cultural baggage. Students contemplating graduate study are strongly recommended to take this course. Fulfills the DIV13 requirement.

### 238. Survey of American Literature II.

Great works of literature transport you to fictional and historical worlds that reveal new insights into the human condition. Since the Civil War, American authors have conducted artistic experiments with their writings to convey the complexity of American life. They have transformed story-telling techniques as well as made the craft of writing a tool to inspire social change. This course explores groundbreaking works of fiction, poetry, and non-fiction that have sought to capture the sweep and diversity of the American experience. Themes include movements for social justice and equality; the effects of modernity, technology, and globalization; and the ever-present tension of tradition vs. progress. The course readings will immerse you in the richness of the American imagination. Students contemplating graduate study in English are strongly recommended to take this course. Fulfills the DIV13 requirement.

### 240. Writing in the World.

Students will be introduced to ways that creative writing is revitalized by its commerce with the world—that writing can be a means of understanding, and even an engine of change. Students will produce original creative work (some of which will involve background research), craft critical responses to course readings and activities, and give oral presentations on outside texts. Instructors will offer regular skills lectures, and student pieces will be “workshopped” in small-group and whole-class settings. Topics and writing genres will vary according to instructor and semester. Open to all students; no previous creative writing experience needed.

### 241. Techniques of Fiction.

In this introductory course on the basics of writing prose fiction, we will read and analyze a variety of short stories with an eye toward becoming better fiction writers ourselves. By reading diverse authors, periods, and approaches to storytelling, we will become more adept at important techniques such as narrative form, characterization, and point of view. We will compose a series of short exercises that may be reviewed in workshop for possible inclusion in a portfolio of significantly revised and polished work.

#### 242. Techniques of Poetry.

An introductory study of prosody and poetics. Class attention is divided among student writing, theory and published models. Weekly writing assignments address a variety of technical issues connected with both traditional and experimental verse, while reading assignments provide examples to follow or possibilities for further study. Matters of voice, affect, intuition, chance and imagination are given as much attention as those analytic skills necessary for clear communication. All students are required to share their oral and written work for group discussion and critique.

#### 243. Techniques of Creative Non-Fiction.

In this introductory course on the basics of writing literary nonfiction, we will read and analyze a variety of examples of creative nonfiction, including memoirs and personal essays, with an eye toward becoming better nonfiction writers and readers ourselves. By encountering diverse authors, periods, and approaches to storytelling and sharing insights and knowledge about our personal encounters with the world around us, we will improve our application of various important techniques such as form, structure, persona, characterization, and voice. We will compose a series of short exercises that with revisions may become longer memoirs and personal essays to share with the class workshop, and assemble a final portfolio of revised and polished work.

#### 244. Techniques of Screenwriting.

An introductory study of basic technical problems and formal concepts of screenwriting. The study of produced screenplays and formal film technique, along with writing scene exercises, builds toward the construction of a short (50-minute) script. *Also offered as PCA 244, and through Film and Representation Studies.*

#### 245. Literatures in Context

Students will be introduced to the ways in which literary works engage with the world that lies outside the text: historical events, social movements, political issues, artistic trends, scientific developments, geographic regions and so on. Each course focuses on a specific work or set of works that have developed within particular real-life contexts, and students will learn strategies for analyzing the relationships between texts and contexts. While the course emphasizes critical reading, writing, and research skills, students may also have the opportunity to engage in creative writing as well. This course is suitable for students at any stage of their academic careers. Topics will vary according to instructor and semester.

#### 250. Methods of Critical Analysis.

This course introduces students to a range of theoretical methodologies used by creative writers and literary scholars. While each section of the course may focus on a different theme or on a different group of primary texts, all sections encourage students to learn and to apply a variety of methods with the goal of crafting critical analyses of literature. In addition, students learn to situate their own critical analyses in conversation with those of other literary scholars, to employ literary and other kinds of evidence in support of their arguments, and to document this research with the conventions most

commonly employed in the field of literary study. Students will continue applying the course methodologies in upper-division creative writing and literary studies courses.

253. Troy and Its Aftermath.

This course explores the city of Troy and the mythology that grew up around it. Once a flourishing center of trade between the East and West in the ancient world, Troy remained a center of cultural contact long after its physical demise through the stories that Greek and Roman authors told about it. But why did Troy and the actions of Achilles, Hector, Odysseus, and Helen so thoroughly capture the attention of ancient audiences? And why do they continue to fascinate people today? We'll begin to investigate these questions by delving into the world of ancient Greece and Rome, reading Homer's *Iliad* and *Odyssey*, Virgil's *Aeneid*, and a selection of plays about the heroes of Troy. We'll also interrogate our own culture, asking why what happened at Troy many millennia ago can become successful motion pictures – like Wolfgang Petersen's 2004 movie *Troy*, for instance – and why television shows like *The Simpsons* and *Family Guy* can successfully satirize the Trojan War. To complement our study of literature and media, we'll also consider how the history of Troy's rediscovery in the nineteenth century and its present-day excavation in the city of Hissarlik, Turkey perpetuate the myth of this famous city.

263. Native American Literature.

This course concentrates on Native American literature printed in English. Some versions will focus exclusively on contemporary fiction; others will take a historical approach to Native writing from the colonial era to the present day; and still others will survey multiple genres, including creation stories, memoirs, nature writing, poetry, short stories, and novels. Students will come to recognize some of the subjects and themes common to Native American studies, and they will learn to examine the forms and techniques of Native American literature. *Also offered through Native American Studies.*

283. Introduction to Latinx Literature.

Latinx communities have played a central role in the U.S. since its inception. This course is a survey of U.S. Latinx literature through a range of genres and cultural expressions, including fiction, poetry, memoirs, film, and performance. Our course will explore the historical, political, cultural, and aesthetic networks established in works produced by four major groups of U.S. Latinx: Mexican Americans or Chicanos, Puerto Ricans or Nuyoricans, Dominican Americans, and Cuban Americans during the 20<sup>th</sup> and 21<sup>st</sup> centuries. Topics to be discussed include identity formation in terms of race, gender, sexuality, and class; decolonization; migration and diaspora; and social justice through art. Reading from a diverse tradition that reflects the contested definition of "Latinx" and its shifting demographics in the U.S., this course investigates how U.S. Latinx literature speaks to and expands "American" literary traditions. Fulfills the DIV13 requirement.

293. A Literary Harvest.

This is a creative writing course in literary nonfiction that focuses on food, food security, and farming. In *Closing the Food Gap*, Mark Winne talks about affordable access to good, healthy food as an issue of social and environmental justice. While environmental writers and activists such as Wendell Berry, Michael Pollan, and Vandana Shiva have alerted us to the ecological, ethical, and health problems associated with large-scale industrial farming, the North Country has long been a haven for sustainable,

small-scale organic agriculture. The course has both a CBL component and a cross-cultural, comparative focus (India). Students will do their CBL work on a local farm or in a food kitchen, and are required to sign up for the CBL lab as well. Fulfills the EL requirement. Prerequisite: ENVS 101. *Also offered as ENVS 293.*

295. Nature and Environmental Writing.

This course is designed for students who want to explore nature writing — the intersection of self and the natural world. We explore how this genre combines the observational, scientific “eye” with the personal, narrative “I” through readings in non-fiction anthologies, novels and/or memoirs. Students write essays on nature and the environment that reflect different objectives within the genre, such as the political essay, the literary field study and the personal essay. Students also keep a “naturalist’s journal.” Discussion of the readings is interspersed with workshop sessions. Fulfills the EL requirement. *Also offered as Environmental Studies 295, and through Outdoor Studies.*

306. Advanced Screenwriting Workshop.

An extension and intensification of ENG 244. Students are expected to work independently on the preparation of two feature-length screenplays. Workshop format emphasizes the revision and editing process. Prerequisite: ENG 244. *Also offered as PCA306 and through Film and Representation Studies.*

307. The Short Story.

In this course, we explore the evolution of the short story—especially in the United States—with special attention to how authors from diverse backgrounds have used this literary genre from the mid-1900s forward. We’ll pay special attention to story collections, including story cycles, graphic stories, novels-in-stories, and thematically-linked stories. We will also explore how authors have utilized the short story’s flexibility to capture and respond to social and political movements, important historical periods, and the influence of technological and cultural changes. Prerequisite: ENG 250.

308. Advanced Creative Non-Fiction Writing.

Building upon the techniques that we acquired in ENG 243, Techniques of Creative Nonfiction, we will seek to deepen our exploration of writing, reading, and analyzing literary essays by reading a diverse range of authors who challenge basic approaches to writing memoirs and literary essays. We will focus on more nuanced concerns, such as style, voice, narrative stance, and structure, and we may experiment with forms and sub-genres such as the lyric essay, the segmented essay, and other hybrid forms. We will also read theory and criticism on creative nonfiction so as to better understand the possibilities this genre offers writers. In a workshop setting, we will analyze our own work in depth with an eye toward deep, comprehensive revision. Preparing the final portfolio will allow us to learn how to line-edit our prose as well as how to critically situate our own work within the genre. Prerequisite: ENG 243.

309. Feature Writing/Literary Journalism.

In this course, students study the basic techniques of literary journalism, a specific genre that combines best practices of journalistic reporting with creative writing. Students survey examples of excellent feature stories, develop their own topics, and produce a series of feature stories, experimenting with various sub-genres, story lengths and literary approaches. Prerequisite: ENG 201, 221, 243, or 295.

310. Advanced Fiction Writing.

Building upon the craft techniques that we acquired in ENG 241, Techniques of Fiction, we will seek to expand our repertoire of approaches to writing, reading, and analyzing short fiction. We will do this by reading an eclectic range of authors who challenge basic storytelling approaches by experimenting with structure, style, voice, and point of view. We will also read theory and criticism on writing fiction and the short story so as to better understand the possibilities this genre offers writers. We'll discuss our writing in a workshop setting, and, in the preparation of a final portfolio, will learn how to line-edit our prose as well as how to critically situate our own work within the genre. Prerequisite: ENG 241.

311. Advanced Poetry Workshop.

An extension and intensification of ENG 242. The class combines workshop critique of student poems with discussions of readings in twentieth century and contemporary poetry (including Modernism, Confessionalism, the Beats, the Black Mountain School, the New York School, and Ellipticism). Poetic theory is also discussed. Students are required to submit a formal manuscript of poems, an arts poetica or manifesto, and to read from their work in public. Prerequisite: ENG 242.

312. The London Stage.

Offered by St. Lawrence's program in England. Students attend the same plays as the ENG 212L class but undertake an independent project instead of the regular classwork. Prerequisites: two English courses, one of which must include the study of drama, and permission of the instructor.

315. Chaucer

This course introduces you to the Father of English literature – Geoffrey Chaucer. Chaucer was the son of a wine merchant, a servant to three kings, a member of Parliament, and an inspired poet. He also was the first author to write in the English language – and what stories he wrote! Examples include *The Canterbury Tales* (a collection of racy narratives told by pilgrims for entertainment), *Troilus and Criseyde* (a tragic romance about two lovers separated by the Trojan War), and several dream visions like *The Book of the Duchess*, *The Parliament of Fowls*, *The House of Fame*, and *The Legend of Good Women* (all poems that explore the reality of waking existence through the subconscious of dreamers). We will examine Chaucer's prodigious and learned output in the context of his own life and the historical turmoil of the mid- to late-fourteenth century that transformed it, focusing on the complex issues of religion, class, gender, sexuality, politics, and authorial influence with which Chaucer himself engages. Prerequisite: ENG 250. *Also offered through European Studies.*

### 316. English Literature of the Middle Ages

What do you think of when you hear the word “medieval”? King Arthur, Lady Guinevere, and Sir Lancelot? Magic, faeries, and monsters? Bubonic plague? *Game of Thrones*? All of these answers are right – to certain extents – but would you have guessed that the Middle Ages also left us with the University system and the liberal arts curriculum, cathedrals, and those nativity plays you may have performed in during elementary school? People in the medieval period were smart, innovative, socially and culturally aware, and had a deep sense of piety that they expressed through creative and devotional outlets, one of which was literature. Topics for this course will vary and will be arranged thematically, but will consistently foreground questions about identity formation, prejudices, gender, sexuality, religion, and politics as we interrogate the literature of our medieval past, a literature that thought of itself as modern and cutting edge. Examples of texts and authors you may encounter in this course could include but are not limited to epics like *Beowulf*, *The Tain*, and *Sir Gawain and the Green Knight*; Old English maxims and riddles; Middle English lyrics; civic and touring drama; saints’ lives; romances like Marie’s *Lais* and Malory’s *Morte D’Arthur*; John Gower’s *Confession of Love*; William Langland’s *Piers Plowman*; and mystical writings by Margery Kempe, Julian of Norwich, Ricard Rolle, and the anonymous author of *The Cloud of Unknowing*. Prerequisite: ENG 250. Also offered through European Studies.

### 319. Shakespeare in Performance

An intensive study of Shakespeare’s plays in performance and of theories of staging, including original practice and contemporary adaptation on stage and screen. Instructors will select from the tragedies, histories, comedies, and romances for thematic integrity. Students should expect significant performance work. Also offered as PCA 319 and through European Studies. Prerequisite: ENG 250 or PCA 250.

### 320. Shakespeare

An intensive study of Shakespeare’s plays and their cultural context, including but not limited to the early modern era and successive centuries’ reception and interpretation. Instructors will select from the tragedies, histories, comedies, and romances for thematic integrity. Students should expect some performance work. Also offered as PCA 320 and through European Studies. Prerequisite: ENG 250 or PCA 250.

### 324. Elizabethan and Jacobean Drama

This course surveys early modern English drama from 1580 to 1640, exploring a selection of comedy, tragedy, and history plays written not by Shakespeare but by his contemporaries. We will consider a range of questions about genre, authorship, gender, performance and performance theory, and the transformation of theatrical conventions from the early days of popular theatre to the last years before Parliament closed the playhouses in 1640. A particular point of emphasis will be the plays’ production histories from their earliest stagings to contemporary revivals and adaptations; to this end, we’ll study early modern “original practices” to help us understand what sixteenth- and seventeenth-century spectators would have seen (and heard) when they attended a play at The Rose or Blackfriars theatres. Authors studied may include Christopher Marlowe, Thomas Dekker, Ben Jonson, Thomas Kyd, Thomas Middleton, John Ford, John Webster, and William Heminge. Prerequisite: ENG 250. Also offered through European Studies.

325. Eighteenth-Century English Literature.

From the Financial Revolution to the French Revolution, the eighteenth century was a period of tremendous change. Literature reflects this period of exciting possibilities in new and evolving genres. In studying texts across the century, we examine how authors use significant form to engage both shifting values and timeless questions about what it means to be human. Prerequisite: ENG 250. *Also offered through European Studies.*

328. English Romanticism.

The Industrial Revolution. The French Revolution. Abolition. World exploration. The British Romantic period saw huge paradigm shifts in ideas about human rights, the natural world, and what it meant to be “English.” This period also saw a set of intellectual and aesthetic revolutions that resulted in a nearly complete overturning of what were considered the aims of “good” poetry and fiction. This course will explore the works of Romantic writers and thinkers such as poets William Wordsworth and John Keats, novelists Mary Shelley and Jane Austen, and critics Edmund Burke and Samuel Taylor Coleridge as they responded to these many revolutionary changes. Prerequisite: ENG 250. *Also offered through European Studies.*

329. The Gothic Novel

What is a Gothic novel? How and when did this subgenre originate? How have its conventions changed, and why? In this course, we answer these questions while examining how the Gothic reflects shifting concepts of science and religion, humanity and monstrosity, the individual and society. In the process, we will try to understand why the Gothic continues to appeal to readers. What functions does it serve? Prerequisite: English 250. Fulfills HU distribution. *Also offered through European Studies.*

331. American Romanticism: 1830-1860.

In this course students will embark on a wild ride through the canon of mid-nineteenth-century American literature. During this literary odyssey, we’ll explore both land and sea in the company of several great American writers: Cooper, Emerson, Fuller, Thoreau, Poe, Hawthorne, Melville, Whitman, and Dickinson. Our discussions will highlight the broad philosophical shift from the Enlightenment to Romanticism; the tension between transatlantic contexts and American literary nationalism; the emergence of new forms of environmental aesthetics; and the political agenda of a generation of writers who were committed to radical projects of social reform, sexual freedom, and racial equality. Prerequisite: ENG 250.

334. Reading the Land: Pastoral and Georgic Literature.

Two different ethics have dominated environmental literature since the classical age. The pastoral involves a retreat from society, an escape into the wilderness, and an embrace of rural leisure. Pastoral writing often features shepherds frolicking in fields, tending their flocks, and piping on flutes. In contrast, the georgic celebrates more intensive agricultural labor and promotes an ethic of hard work. Georgic writing often depicts crop-based agriculture, draft animals pulling plows, and farmers who are committed to a particular piece of ground. In this course, we will study the pastoral and georgic modes as they took shape in the work of the Roman poet Virgil, gained popularity in British literature, and then

migrated across the Atlantic to America and across genres from poetry into prose. To conclude the semester, we will discuss the emergence of a “new” georgic in response to contemporary environmental concerns. Fulfills the EL requirement. Prerequisite: ENG 250.

339. The Eighteenth-Century Novel.

The novel is a relatively new genre that emerged in the early eighteenth century. Why did the English novel originate at this time? What did authors imagine it as being and doing? And how did the genre evolve during this century? To answer these questions, we will situate the novel within its historical contexts, examine eighteenth-century debates about the form, and read influential examples by writers such as Aphra Behn, Daniel Defoe, Samuel Richardson, Henry Fielding, Horace Walpole, and Jane Austen. Prerequisite: ENG 250. *Also offered through European Studies.*

340. The Victorian Novel.

The British Victorians ran the mightiest global power of their time and struggled with many of the same issues as we do—both public (technology, prejudice, pollution) and private (love, marriage, family). This course examines their novels within this context, and we will read a selection of works written in both the realistic tradition and in novelistic forms that arose or resurfaced late in the period (science fiction, horror, and detective fiction). Prerequisite: ENG 250. *Also offered through European Studies.*

346. American Literature and the Environment.

This course explores the relationship between American culture and the natural environment through the lens of literary expression. We will study the evolution of environmental aesthetics from the colonial period through the Romantic era and into the twentieth century. Students will draw upon the insights of environmental history and apply them to literary analysis. The course will generally take shape around a particular theme (e.g., the history of frontier settlement, the politics of wilderness preservation, Adirondack literature, Arctic/Antarctic exploration, animal studies, environmental justice movements, or the desert/ocean aesthetic). Prerequisite: ENG 250. Fulfills the EL requirement. *Also offered as ENVS 346.*

349. Modern British and American Poetry.

At its heart, poetry is an intentional arrangement of sound and rhythm. Over time, some of those arrangements have been established as more pleasing, natural, and meaningful, i.e. as poetic conventions. But when the world comes undone, looking and sounding completely different, so too must poetic form. “To break the pentameter, that was the first heave,” Ezra Pound writes. Starting with the “sprung rhythm” of Gerard Manley Hopkins, we will study key innovations of modern poetry such as free verse, intentional “dissonances” and “irregularities,” polyglotism, avant-garde manifestos, and other strange and new shapes, sounds, and rhythms definitive of the 20th century. Particular attention will be devoted to Gertrude Stein, Wallace Stevens, H.D., Claude McKay, T.S. Eliot, Marianne Moore, Langston Hughes, Stevie Smith, and W.H. Auden. Prerequisite: ENG 250.

352. Contemporary Literature and the Environment.

A study of the contemporary literary response to rising national interest in the natural world and rising awareness about the danger to natural resources. Readings are predominantly in prose (novels and essays), with some poetry included. Among the questions the authors ask: as we approach the natural world, how can we move beyond metaphors of dominion? What are the biases of gender, geography, and culture that we bring to our inquiry? What is the relationship between the human and the “natural”? What does it mean to fully invest ourselves in our local environment? Fulfills the EL requirement. Prerequisite: ENG 250. *Also offered as ENV 352, and through Outdoor Studies.*

353. Modernist Fiction.

Can a protagonist be composed entirely of trivial, fleeting impressions made on strangers? How does a veteran, frozen by PTSD, recount the past? Modernist fictions are characterized by rigorous innovations in style, subject matter and perspective, all of which reflect profound changes in the way the world is experienced, felt, and known. In this course, we will read iconoclastic prose of the early twentieth century, attending to the ways in which the core problematics of the era – how language shapes our cognition, how individuals are at the mercy of social and historic forces, how sex is a discourse and a product of the consumer economy– were taken up and addressed through radical developments in discursive form. Prerequisite: ENG 250.

354. The Modern American Novel.

A study of modern American novelists from Dreiser, Cather, and Lewis through Hemingway, Fitzgerald, Faulkner, and important writers of the 1930s. Prerequisite: ENG 250.

355. Contemporary British Novel.

This course focuses on the post-World War II British novel. Authors studied have included: Julian Barnes, A. S. Byatt, Angela Carter, John Fowles, William Golding, Kazuo Ishiguro, Doris Lessing, Ian McEwan, Iris Murdoch, V. S. Naipaul, Salman Rushdie, Zadie Smith, and Jeanette Winterson. Prerequisite: ENG 250. Also offered through European Studies.

356. Contemporary American Literature.

How do American writers conceptualize past, present, and future from a contemporary moment, and how does literature structure our contemporary identities in a global age? Focusing on U.S. fiction, this course examines works from the 1950s to the present in historic, social, political, and aesthetic contexts. Course texts engage with a variety of themes related to the construction and deconstruction of American identity. Topics include the culture of the Cold War; postmodernism and paranoia; consumerism and technology; Native American dispossession and resistance; the legacy of slavery; diaspora and displacement; issues of identity and collective memory; border crossing and migration; globalization; and the post-9/11 world. Questioning shifting definitions of citizenship and nationhood in a period characterized by transnational circuits of exchange, we also consider whether it even makes sense to speak in terms of national affiliations and literatures in an era of globalization. Prerequisite: ENG 250.

357. Post-Colonial Film, Literature, and Theory.

Throughout the mid- to late-twentieth century, formerly colonized people from around the world gained independence and established new nations. It meant the end of a particular form of oppression but also the enormous challenge of producing new cultural norms, governance, social relations, and intellectual habits. Decolonization gave as much rise to civil wars and coup d'états as to a rich body of art that imagines unseen possibilities while registering the realities of intergenerational trauma, survival, and diaspora. We will explore how new media capture these experiences by encountering films and novels by Ousmane-Sembène, Michel Khleifi, Atom Egoyan, Sohrab Salles, Trinh T. Minh-ha, Tayeb Salih, and Arundhati Roy, to name a few. We will supplement our reading and viewing with major architects and theorists of anti-colonial revolutions like Franz Fanon and C.L.R. James. *Also offered as Philosophy 357 and Global Studies 357.* Prerequisite: ENG 250.

363. Harry Potter.

Since 1997, J. K. Rowling's Harry Potter Series has delighted a range of readers, from children who grew up with the eponymous hero to scholars who examine the books' philosophical messages. In this class, we will explore how Rowling uses literary conventions to explore the problems of growing up, the challenges of dealing with those who differ from us, the virtues that enable us to live meaningful lives, and the institutions that enable us to thrive. Although we will acknowledge the significance of visual and interactive adaptations, this course will focus on the texts of Rowling's novels. Grades will be based on class participation, discussion-leading, and multiple papers. Prerequisite: ENG 250.

364. J.R.R. Tolkien.

This course explores the endlessly alluring world of Middle-earth, which J. R. R. Tolkien was developing throughout the sixty years of his adulthood. Our real-world contexts for this exploration might include his work as a 20th-century scholar of medieval languages and literatures, his service as a lieutenant during World War I, and his love of the natural world, while our literary contexts might include his translations or rewritings of Anglo-Saxon epic, medieval romance, Norse myth, and Arthurian legend. Certainly, we will be reading *The Hobbit*, *The Lord of the Rings*, *The Silmarillion*, and selections from Tolkien's scholarship and short fiction. Prerequisite: ENG 250 or FRPG 1011 (the Tolkien FYP).

368. Contemporary American Poetry

This course examines post-modern American poetics through close attention to collections published after 1970 and traces how contemporary poets have borrowed from, challenged, and continued to develop the poetic theory and social engagement characteristic of major movements like Confessionalism, the Beats, the New York School, the Black Arts movement, and the L-A-N-G-U-A-G-E poets. Prerequisite: ENG 250.

389, 390. Projects for Juniors.

Student-initiated projects involving significant study and writing carried out through frequent conferences with a faculty sponsor. These projects are completed in addition to the five courses required for the advanced level of the major. Prerequisites: junior standing, a 3.25 GPA in English, and approval by the departmental Honors/Independent Projects committee. Proposals must be submitted to

the committee by March 1 of the semester preceding the beginning of fall projects, and by November 1 of the semester preceding spring projects.

4,000-4,999. Special Studies in Language and Literature.

The content and the studies rubric area of these advanced special topics courses varies, and is announced when the *Class Schedule* is published prior to registration.

450. SYE: Senior Seminar.

Senior seminars are designed to provide students with the opportunity to apply the knowledge and skills they have developed in their own progress toward completion of the major. Seminars vary in topic, but each requires participants to complete a substantial writing project and to contribute both formally and informally to classroom discussions. Prerequisites: ENG 250 and senior standing.

489,490. Projects for Seniors.

Student-initiated projects involving significant study and writing carried out through frequent conferences with a faculty sponsor. These projects are completed in addition to the five courses required for the advanced level of the major. Prerequisites: senior standing, a 3.4GPA in English, and approval by the departmental Honors/Independent Projects committee. English majors who complete a senior project will earn the Honors in English designation if, at the conclusion of the semester they complete their project, their English GPA (including the project grade) is at least 3.7. Proposals for fall projects must be submitted to the committee by March 1 of the semester preceding the beginning of fall projects, and by November 1 of the semester preceding the beginning of spring projects.

## Environmental Studies

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Major and combined majors offered.

A student may choose environmental studies as a stand-alone major, a combined major in conjunction with other departments (see below), or as one field in a multi-field major (see Curriculum, Multi-field Major Program). Students can earn a B.S. degree emphasizing environmental science via combined majors with biology, chemistry, geology, mathematics or psychology; or a B.A. degree in the stand-alone major or in a combined major with economics, English, government, philosophy or sociology.

Visit the program's website at <https://www.stlawu.edu/offices/environmental-studies>.

### Restrictions

1. Students desiring to major in any of the environmental studies majors must have earned a minimum of 2.25 in ENVS 101 to be admitted to the major.
2. For the stand-alone major and all combined majors, all Nature/Society (N/S) courses, all Environmental Science and Policy (ESP) courses and all required cross-listed or dual-listed electives, must be taken in the environmental studies department at St. Lawrence University.

3. For students undertaking double majors and including environmental studies as one of the two majors, no more than two courses cross-listed or dual-listed with the department of the second major may be counted as electives toward the environmental studies major.
4. For the stand-alone major no more than two courses can be counted as electives from other institutions and University-approved abroad/away programs. For all combined majors only one ENVS course can be counted.
5. Students intending to pursue an interdisciplinary major in environmental studies must take 101 by the end of their fourth semester.
6. A major in environmental studies cannot be declared later than the mid-point of a student's fifth semester, or equivalent.

## Stand-Alone Major

The stand-alone major (B.A.) serves students who wish to concentrate their efforts in environmental studies. This major is tailored to individual interests and emphasizes depth in selected subjects, as well as the integrative, interdisciplinary approaches of environmental studies.

### Requirements

All standalone majors in environmental studies require the following courses:

ENVS 101. Our Shared Environment. (1 unit)

Environmental Science and Policy (ESP), Nature/Society, and/or approved research-based SYE courses (5 units)

Natural Science Elective\* (1 unit)

Social Science/Humanities Elective\* (1 unit)

Electives\* (3 units)

**Total:** 11 units

\*Courses must be from approved cross-listed or dual-listed courses taught by faculty in other departments on campus.

## Combined Majors

Environmental studies, in conjunction with other departments, has created 10 interdisciplinary majors, allowing students to integrate substantial efforts in traditional disciplines with environmental studies. These majors are designed for students who wish to acquire expertise in another department while still benefiting from the integrative approaches of environmental studies. Five B.S. options are available with natural science departments: biology, chemistry, geology, mathematics and psychology. Five B.A. options are available with departments in the social sciences and humanities: economics, English, government, philosophy and sociology. In each interdisciplinary major, it is essential that the student work closely with advisors in both departments.

Progress in both halves of the combined major should take place at about the same pace.

### **Combined Major - Core Courses**

All Combined majors in environmental studies require the following courses:

ENVS 101. Our Shared Environment. (1 unit)

Environmental Science and Policy (ESP), Nature Society, and/or approved research-based SYE courses (4 units)

Electives\* (2 units)

**Total:** 7 units

\*One elective must be a cross-listed or dual-listed natural science course for B.A. students or a social science or humanities course for B.S. students. Some combined majors require an SYE in either department which may raise the total units to 8 if taken in environmental studies. Honors are always in the major, incorporating both departments and at least one committee member from each department. The faculty mentor may be in either department.

### **Environmental Studies–Biology**

Combined Major Core: 7 units (listed above)

#### **Biology**

101,102. General Biology with lab.

221. General Ecology with lab.

Electives\* (5.5 - 5.75 units)

**Total:** 16.25 - 16.5 units

\*Electives that are cross-listed or dual-listed should be taken under the biology number. Biology electives must include two 300 or 400 level courses and one of the following: (1) 3.75 additional units with lab, (2) two additional units with lab and one unit of lab or field-based SYE, or 3) 1.25 additional units with lab and a 1.25-unit research methods course with lecture and lab. Students planning for graduate work in biology should take General Chemistry and Statistics.

\*Electives that are cross-listed or dual-listed should be taken under the biology number. Biology electives must include two 300 or 400 level courses and one of the following: (1) three additional units with lab, (2) two additional units with lab and one unit of lab or field-based SYE, or 3) one additional unit with lab and a one-unit research methods course with lecture and lab. Students planning for graduate work in biology should take General Chemistry and Statistics.

### **Environmental Studies–Chemistry**

Combined Major Core: 7 units (listed above)

#### **Chemistry**

103,104. General Chemistry. (2.5 units) *Or*

105. Accelerated General Chemistry. (1.25 units)

205. Quantitative Analysis. (1.25 units)

221, 222. Organic Chemistry. (2.5 units)

306. Environmental Chemistry and Toxicology. (1 unit)

341. Quantum Chemistry and Spectroscopy. **or**

342. Biophysical Chemistry. (1 unit)

**Lab courses, to be selected from: (2 units)**

351. Advanced Organic Laboratory.

352. Inorganic Chemistry Laboratory.

353. Physical Chemistry Laboratory.

452. Instrumental Analysis.

**Total:** 16 or 17.25 units

**Environmental Studies–Economics**

Combined Major Core: 7 units (*listed above*)

**Economics**

100. Introduction to Economics. (1 unit)

200. Quantitative Methods in Economics. (1.5 unit)

251. Intermediate Microeconomic Theory.\* (1 unit)

252. Intermediate Macroeconomic Theory.\* (1 unit)

308. Environmental Economics. **or**

384. Natural Resource Economics. (1 unit)

Electives\* (3 units)

**Total:** 15.5 units

\*Electives that are cross-listed or dual-listed should be taken under the economics number. Dual-listed electives count toward the economics portion of the combined major. Economics electives must include at least two 300- or 400-level courses. Economics majors must pass Econ 251 and Econ 252 with a grade of 2.0 or higher.

**Environmental Studies–English**

Combined Major Core: 7 units (*listed above*)

**English**

A. At least three writing courses, two of which are in one of the following sequences:

- 201 and 309 Journalism
- 202 and 293 Creative Non-fiction
- 241 and 310 Fiction
- 242 and 311 Poetry
- 243 and 293 Creative Nonfiction
- 243 and 295 Creative Nonfiction
- 243 and 308 Creative Nonfiction
- 243 and 309 Nonfiction/Journalism

- 244 and 306 Screenwriting
- A relevant special topics course in writing or independent study in writing may count as one course.
- B. At least four literature courses, which must include:
  1. At least one of the following survey courses:
    - 190EL. Introduction to Literary Forms, Nature Writing.
    - 222. Introduction to Multi-ethnic American Literature.
    - 225. Survey of English Literature I.
    - 226. Survey of English Literature II.
    - 231. Adirondack Literature.
    - 237. Survey of American Literature I.
    - 238. Survey of American Literature II.
    - 263. Native American Literature.
  2. ENG 250. Methods of Critical Analysis.
  3. At least two of the following 300-level literature courses:
    - 328. English Romanticism.
    - 331. American Romanticism.
    - 334. Reading the Land: Pastoral and Georgic Literature.
    - 346. American Literature and the Environment.
    - 352. Contemporary Literature and the Environment.
    - 4038. Planetary Modernisms.
- A relevant special topics seminar or independent study in literature.

**Total:** 14 units

Note: Courses that are cross-listed or dual-listed should be taken under the course number for English. These electives count toward the English portion of the combined major.

### **Environmental Studies–Geology**

Combined Major Core: 7 units (*listed above*)

#### **Geology (6-6.5 units)**

GEOL 103. Dynamic Earth or Environmental Geology

GEOL 211. Geomorphology.

GEOL 216. Sedimentology **or** GEOL 316. Carbonate Sedimentology **and** GEO 320. Regional Field Studies: Geology of the Caribbean

GEOL 319. Hydrology and Hydrogeology

GEOL 362. Geochemistry

Elective (1) at the 200 or 300 level

Required Cognates (3.5 units)

Majors are required to take at least one semester of the following courses:

CHEM 103. General Chemistry

MATH 135. Calculus

PHYS 151. University Physics **or** BIO 101. General Biology

**Total:** 16.5-17.0 units

It is also recommended that all Environmental Studies–Geology majors *take the following courses:*

CHEM 104 and MATH 136

\*Electives that are cross-listed or dual-listed should be taken under the course number for geology. These count toward the geology portion of the combined major.

### **Environmental Studies–Government**

Interdisciplinary Major Core (*listed above*) (7 units)

#### **Government**

- 103. Introduction to American Politics.\* (1 unit)
- 105. Introduction to Comparative Politics.\* (1 unit)
- 108. Introduction to International Politics.\* **or**
- 206. Introduction to Political Theory. (1 unit)
- 290, 291, 292, or 293. Research Seminar. (1 unit)
- 343. Ecology and Political Thought. (1 unit)

Electives\*\* (2 units)

Total:14 units

\*At least one of these courses must be taken as a writing-intensive course.

\*\*Electives that are cross-listed or dual-listed should be taken under the government number. These cross listed or dual-listed electives count toward the government portion of the combined major. Government electives must include one international course and one theory course (usually 108 and 206).

### **Environmental Studies–Mathematics**

Interdisciplinary Major Core (*listed above*) 7 units

#### **Mathematics**

- 135. Calculus I. (1 unit)
- 136. Calculus II. (1 unit)
- 205. Multivariable Calculus. (1 unit)
- 230. Differential Equations. (1 unit)
- 350. Mathematical Modeling. (1 unit)

Mathematics elective at the 300- or 400-level (1 unit)

#### **Statistics**

- 113. Applied Statistics. (1 unit)
- 213. Applied Regression Analysis. (1 unit)

**Total:** 15 units

### **Environmental Studies–Philosophy**

Interdisciplinary Major Core (*listed above*) 7 units

#### **Philosophy**

- 201. Ancient Philosophy. (1 unit)
- 202. Reasoning. (1 unit)
- 203. Ethical Theory. (1 unit)
- 206. Introduction to Political Theory. (1 unit)
- 208. Modern Philosophy. (1 unit)
- 310. Philosophy of the Environment. (1 unit)

Electives\* (2 units)

**Total:** 15 units

\*Electives that are cross-listed or dual-listed should be taken under the philosophy number and count toward the philosophy portion of the combined major.

### **Environmental Studies–Psychology**

Interdisciplinary Major Core (*listed above*) (7 units)

#### **Psychology**

- 101NL. Introductory Psychology. *or*
- 101WL. Introductory Psychology. (*with lab*) (1.25 unit)
- 205. Research Methods in Psychology. (1 unit)
- 318. Environmental Psychology. (1.25 units)

Electives\* (5.25 units)

**Total:** 15.5 units

\*Electives must include at least one course from the biological/evolutionary list and one from the social/cognitive list (see psychology). One course from the biological/evolutionary theme must be taken for lab credit. One elective must be a seminar or independent project. Note: STAT 113 or ECON 200 must be taken prior to or concurrently with PSYC 205.

### **Environmental Studies–Sociology**

Interdisciplinary Major Core (*listed above*) (7 units)

#### **Sociology**

- 110. Global Problems. *or*
- 112. Inequality. *or*
- 161. Social Problems and Policy. *or*
- 187. Environment and Society. (1 unit)

Other courses may be considered, in consultation with the department chair.

- 203. Foundations of Social Theory. (1 unit)
- 300. Qualitative Research Methods. *or*
- 301. Quantitative Research Methods. (1 unit)

Two socio-environmental dynamics courses (2 units)

- 228. Race and Ethnicity.
- 253. Race, Class, and Environmental Justice.
- 257. Environmental Problems
- 264. Environmental Movements.
- 273. The Hidden Faces of Historical Capitalism.
- 288. Dilemmas of Development.
- 314. Nomads in World History.
- 377. Sociology of Consumption.
- 3118. Sociology of the Family.
- 4010. Recreation and Resistance.

Other courses may be considered, in consultation with the department chair.

Two electives in sociology\* (2 units)

Capstone: one additional 300/400 socio-environmental dynamics course with research component (1 unit)

**Total:** 15 units

\*Electives that are cross-listed or dual-listed should be taken under the sociology number and count toward the sociology portion of the combined major.

## Honors in Environmental Studies Majors

Students enrolled in one of the environmental studies majors may pursue honors in that major. To qualify for graduation with honors, students must have a minimum grade point average of 3.5 in all courses of the major at the time of graduation. In addition, students must successfully complete an honors project supervised, or read, by at least one faculty advisor in the environmental studies core. An honors project involves primary data collection, analysis of that data, and rigorous literature review. An honors project is usually completed over the course of an academic year as 1.5 or 2.0 units of credit, depending on the project, with the advisor's consent. Juniors interested in the honors program should consult with the environmental studies faculty. (See also Honors in the Curriculum section of this *Catalog*.)

## Courses

The "N/S" designation indicates that this course meets the **Nature/Society** requirement. Nature/Society courses are recommended to students new to the major. The "ESP" designation indicates that this course meets the **Environmental Science and Policy (ESP)** requirement for the environmental studies major.

### 101. Our Shared Environment.

This course introduces students to the basic concepts and interrelationships needed to understand the complexities of environmental problems. The course surveys the characteristics of natural environments coupled with diverse human populations, explores how those systems function and interact, discusses causes and consequences of environmental degradation, and assesses multifaceted solutions to environmental problems. Students examine these socio-environmental systems through the lens of many disciplines (including natural sciences, social sciences, and the humanities) and frameworks (justice, sustainability, resilience, and limits) to understand the environment and to discover solutions to environmental problems. The course also highlights the impact of economic over-production, governmental policy, and personal lifestyles, including affluence, as well as the environmental, social, and racial injustices associated with environmental degradation. The course emphasizes interdisciplinary thinking.

### 103. Religion & Ecology.

How does religion shape human understanding of, and participation in, ecological systems? This course samples widely from a range of religious traditions to come to a better understanding of the diverse ways that people have developed for interacting with animals, plants, water, and the land, and how those behaviors work in tandem with systems of knowledge and practice. The class has a substantial focus on environmental ethics, and thinks hard about how different religious systems might contribute to either or both environmental degradation and solutions to environmental problems. Traditions sampled include Islam, Christianity, Hinduism, Daoism, Judaism, Buddhism, Native American religions, and Wicca/Neo-Paganism. *Also offered as REL 103.*

### 105. Energy.

This course covers the nature of energy, its application in modern society and a variety of issues associated with that use. We will study the physical principles of mechanical, thermal, electrical, optical and nuclear energy in order to better understand the role of energy in society, focusing on fossil fuels, electric power plants, automobiles, global warming, the ozone layer and energy conservation, as well as nuclear, solar and other power sources. This course makes extensive use of elementary algebra and scientific notation. 105 is taught in a lecture format with shorter integrated lab activities. *Also offered as PHYS 105.*

### 106. Chemistry & Environment with lab.

Chemistry and environment (with lab) is designed for non-science majors who wish to learn chemistry at the introductory level. In this course, we will explore the distribution and interaction of chemicals in air, water, and soil, as well as how human activities affect the chemistry of Earth. We will discuss how chemistry can help us understand local and global environmental issues, and what it tells us about possible solutions. There are also opportunities to explore environmental chemistry outside with several field trips and even an outdoor lab! Some questions that we will address in this course include: How can chemistry help prevent, diagnose, and solve environmental problems? How do people use chemistry to understand and create a more sustainable world? Lab course CHEM-106L/ENVS-106L is required. Fulfills NS-L distribution and EL requirement. No pre-req!

#### 110. Environmental Geology.

Environmental geology is a multidisciplinary field of applied science that involves the study of the interaction of humans with the geologic environment including the biosphere, the lithosphere, the hydrosphere, and the atmosphere. The field of environmental geology includes, but is in no way restricted to: 1) the study of the structure and processes of the earth, mineral, and rocks, especially those that are near-surface or have some significant effect upon humans, 2) the study of natural hazards and disasters, including defining and mitigation (or adaptation) of human exposure and threat, 3) managing industrial and domestic waste disposal and minimizing or eliminating effects of pollution, and 4) managing safe and environmentally responsible stewardship of geological resources, including minerals, fossil fuels, and water and land use. This course is designed to give the student basic understanding of the processes and materials of the earth and relate these concepts/products to human activities. *Also offered as GEOL 110.*

#### 112. Global Climate.

Climate is perhaps the single most important and pervasive factor controlling global ecosystems and human well-being. This interdisciplinary course examines global climate from a historical perspective, beginning with the formation of the solar system and continuing through geologic time to the present. Topics include the development of the atmosphere; the workings of the global “heat engine” of atmosphere, oceans and continents; evidence for past climate change; causes of global climate change; the effects of climate change on human evolution; and the effects of human evolution on the global climate system. This is a studio lab course. *Also offered as GEOL 112 and PHYS 112 and through Global Studies.*

#### 115. Oceanography.

FIRST YEARS AND SOPHOMORES ONLY. This broad introductory course explores the oceans of the world, the living organisms of the ocean and the vast mineral wealth of the ocean floor. The course explores oceanography through discussion of elementary scientific concepts in the context of geology, biology, chemistry and physics. Topics include the origin of oceans; the composition and history of seawater; oceanic currents, tides, waves and beaches; the sea floor; plant and animal life in the sea; oceanic resources and food; and marine pollution. Fulfills EL Requirement. Fulfills QLR Requirement. Restricted to FY or Sophomores only.

#### 117. Dynamic Ocean.

This course is an introduction to geological and physical oceanography which provides students with an understanding of the marine environment and natural and human impacts on it. Topics include ocean in Earth system, plate tectonics, marine sediments, atmosphere and ocean, currents, waves and tides, coastal ocean and shoreline processes. It also includes study of oceans and climate change, ocean's role in global warming, and ocean acidification. There are no prerequisites for this course. Fulfills EL Requirement. Fulfills QLR Requirement.

187. Environment and Society.

This course explores the complex interrelations between human societies and the environment via the sociological perspective. The sociological perspective is a means of making the familiar aspects of our lives, and our understandings of the world, seem strange and new. In doing so we can better analyze our world and our place in that world especially with regard to human and natural interactions. In this course we will learn about the concepts, theories, and methods that sociologists use to understand critical issues of environmental degradation and ecological crises and how these problems are experienced differently depending on one's location in global society. By the end of the course students will become familiar with analytical tools that enable an understanding of some underlying drivers of environmental degradations and ideas of what can be done to chart a better future. *Also offered as SOC 187.*

205. Quantitative Analysis. (1.25 units)

An introductory course dealing with the chemical, physical and logical principles underlying quantitative chemical analysis. Among the broad topics treated are data evaluation, titrimetry, solution equilibria, potentiometry and absorption spectroscopy. Lectures plus one laboratory per week. Prerequisites: ENVS 101; CHEM 104 or 105 (with a 2.0 grade or higher) or permission of instructor. *Also offered as CHEM 205.* Offered only in the spring semester.

209. Vertebrate Natural History.

A field-oriented course that explores the biology of vertebrate animals, with emphasis on understanding the diversity, life history, evolution and unique adaptations of vertebrates. The laboratory focus is on developing scientifically sound skills in observation and on learning to identify local vertebrates. Some extra class meetings are required for regional field excursions and for identifying local vertebrates at the times of day when they are active. Offered alternate fall semesters. Prerequisites: ENVS 101, BIOL 101, BIOL 102 or permission of instructor. *Also offered as BIOL 209 and through Outdoor Studies.*

211. Geomorphology.

Geomorphology, literally "earth-shape-study," is the study of the landscape, its evolution and the processes that sculpt it. The purpose of this course is to enhance the student's ability to read geologic information from the record preserved in the landscape. This is achieved through understanding the relationship between the form of the Earth's surface and the processes that shape that form. Students combine quantitative description of the landscape with study of landscape shaping processes into a comprehensive investigation of the dynamic landscape system including glaciation, hills, rivers, mountains and plains. Prerequisite: ENVS 101 and GEOL 103. *Also offered as GEOL 211.*

213. Global Environmental History.

What myths and theories have various societies created about their natural environment? How have they understood their place in the natural order? How have they changed their environment and been changed by it? This course explores environmental history, a new field that focuses on how humans have interacted with nature over time. In environmental history, animals, plants, diseases and climate are actors as much as humans and human institutions. We will examine case studies from around the

world including Asia, Europe and North America in a variety of time periods from ancient to modern. Students will complete a variety of short writing assignments, conduct short research projects, and present their findings in oral presentations. Fulfills HU Distribution (2013 curriculum). Fulfills the EL requirement (2013 curriculum).

#### 221. General Ecology.

A study of the factors influencing the abundance and distribution of species, including interactions between individuals and their physical/chemical environment, population dynamics and the structure/function of communities and ecosystems and their responses to disturbance. Labs are field-oriented and emphasize characteristics of local communities or specific techniques such as estimation of population density. Lectures and one lab per week. Prerequisites: ENVS 101; BIOL 101, 102 or equivalent; or permission of instructor. *Also offered as BIOL 221 and through Outdoor Studies.*

#### 230. Food From the Sea

Throughout history human populations and cultures have been shaped by their use of finfish, shellfish, and seaweeds from the marine biome. What species have been exploited, how has this changed over time, and can these marine resources be used in a sustainable way to feed the growing global population? This course will explore these larger questions as it uncovers (a) the biodiversity and ecology of marine fishery organisms (whales, fish, squid, clams, etc.), (b) the impacts of human predation on these organisms, (c) efforts to aquaculture and conserve certain seafood species, (d) health issues related to seafoods, and (d) seafood marketing. This course will be based largely on class discussions and projects will explore sustainable uses of marine and even freshwater species. Lab BIOL 230L is required

#### 230. Differential Equations

An introduction to the various methods of solving differential equations. Types of equations considered include first order ordinary equations and second order linear ordinary equations. Topics may include the Laplace transform, numerical methods, power series methods, systems of equations and an introduction to partial differential equations. Applications are presented. Prerequisite: Mathematics 136. Offered in spring semester. Counts toward the public health minor.

#### 231. Health Effects of Pollution. (N/S)

An introduction to the scientific study of environmental agents and their human health effects. Emphasis is on the environmental causes of disease, including biological agents, hazardous waste, radiation, pesticides, flame retardants, drinking water contaminants, food additives, housing, occupational hazards and stress. Case studies illustrate how health effects are investigated by epidemiology and how theories of disease have evolved. Procedures for establishing regulatory policy and health standards are also discussed. Prerequisite: ENVS 101.

233. Introduction to GIS.

NO FIRST YEARS REGISTRATION IN LAB ( GEOL 233L) REQUIRED. Geographic Information Systems (GIS) is the use of computers to manage, display and analyze spatial or geographical information. This course introduces students to the basic concepts, functions, and applications of GIS. We discuss maps, data sources and management, and geographic techniques, including global positioning systems, aerial photography and satellite imagery. Through a series of lab exercises students explore the analytical functions of GIS, such as proximity, overlay and three dimensional modeling. To further understand GIS practices and applications, each student develops a GIS project with data appropriate to his or her area of interest. Counts toward the public health minor.

251. Independent Projects in Environmental Studies.

For students desiring to do individual research in environmental studies. May be elected only after submission of a written proposal during the prior semester and approval by core faculty of environmental studies. Prerequisites: ENVS 101 and permission of instructor.

253. Race, Class, and Environmental Justice.

This course focuses on the distribution of environmental degradation and environmental protection, both domestically and globally. The social processes that generate synergistic racism and class stratification, affecting the distribution of ecological costs and benefits, are explored. Substantive topics include the siting of hazardous facilities and thermo-nuclear weapons testing, the socio-ecological conditions of migrant farm workers, extraction of resources from Native lands, and the transnational export of toxic waste to the "Global South." The course examines the origins and impacts of a distinct environmental justice movement that has emerged in the U.S. Written and oral assignments involve individual and collaborative quests for socially equitable solutions to socio-eco-historical injustices. Prerequisite: ENVS 101. *Also offered through Sociology.*

256. Art and Nature.

An overview of nature as a subject of artistic representation, in ancient Mediterranean and Mesopotamian cultures, and in the West from the Renaissance to the present. This course explores the ways in which depictions of nature have both reflected and shaped constructs of the natural world, by reference to religions, philosophies and moral values. Works of art to be examined include obvious examples of nature in art, such as landscape painting, and less obvious ones, such as villas and portraits, as well as earthworks and other environmental art created by contemporary artists. This course requires no previous experience of art history. Also offered through Outdoor Studies. Fulfills HU Distribution. Fulfills the EL requirement.

258. Ethnobotany.

Ethnobotany is an interdisciplinary field drawing on concepts from both natural and social sciences to investigate human-plant interactions. This course illustrates the importance of plants in our everyday life and the influence of human activities on plant populations. Independent projects center around surveys and experiments on socio-economically important plants. Field trips and labs explore Native American reservations, botanical gardens, greenhouses, nature reserves and plant population survey

techniques. Three hours lecture and one three-hour laboratory per week. Prerequisite: General BIOL 101 and ENVS 101. *Also offered as BIOL 258 and ANTH 258.*

263. Global Change and Sustainability. (N/S)

This Nature/Society course considers how we relate to planet Earth, our home. The course examines how social systems can be organized to lessen their impact on natural systems, lessen inequalities within generations, and ensure the viability of natural resources for future generations. To do this, the course examines the concept of sustainable development as it develops through the United Nations and enacted by member states. Students also consider case studies that exude principles of sustainability that may be more satisfying than those developed by the UN. The course ends with a thorough critique of the idea of sustainable development and a reflection on alternative models of the human/nature relationship that may be more adequate at our point in history. The central theme of the course is work, how we work and “use” the planet, and our conceptions of that work. The course includes a lab component where students apply the largely theoretical in-class material to hands-on, physical work at our department’s Living Laboratory while critically examining the concept of work in relation to sustainability. Pre-requisite: ENVS 101.

264. Environmental Movements.

Students will explore diverse case studies of grassroots collectives mobilizing to address energy production, conservation, environmental contamination, food, and climate change. Throughout, we will draw on, and apply, sociological theories of social movements and social change. Students will have an opportunity to engage in action-oriented research related to environmental movements and social advocacy, guided by their own passions and interests. Fulfills SS Distribution (2013 curriculum). Fulfills the EL requirement (2013 curriculum). Pre-req: Must take a sociology course.

271 Landscape Ecology with lab (N/S)

The course provides theoretical principles of landscape ecology linked with planning and the design of landscapes and the restoration of degraded environments. Lecture explores the ecological processes inherent to landscape ecology. Students will develop spatial assessment skills through the use of GIS in the lab and field. Characterization of landscape patterns and dynamics for detecting or simulating landscape change (i.e. fragmentation) and consequences for species and populations will be the basis of student projects. Pre-requisite: ENVS 101.

275. Energy and the Environment. (N/S)

this course examines the nexus of energy, environment, and economics from an interdisciplinary perspective. To do this, we will begin with a discussion of how the collapse of societies is related (or not related) to resource and energy depletion, evolving into a discussion of topics such as the limits to growth and peak oil. The middle portion of the course is dedicated to an examination of how the major sources of energy for current society impact the environment. The last part of the course focuses on how the idea of economic growth has evolved from the pre-industrial world to today, and how this current understanding of economic growth can lead to overexploitation of both energy and environmental resources. Prerequisite: ENVS 101. *Also offered through Peace Studies.*

293. Literary Harvest.

This is a creative writing course in literary nonfiction that focuses on food, food security, and farming. In *Closing the Food Gap*, Mark Winne talks about affordable access to good, healthy food as an issue of social and environmental justice. While environmental writers and activists such as Wendell Berry, Michael Pollan, and Vandana Shiva have alerted us to the ecological, ethical, and health problems associated with large-scale industrial farming, the North Country has long been a haven for sustainable, small-scale organic agriculture. The course has both a CBL component and a cross-cultural, comparative focus (India). Students will do their CBL work on a local farm or in a food kitchen, and are required to sign up for the CBL lab as well. Prerequisite: ENV5 101. *Also offered as ENG 293.*

295. Nature & Environmental Writing

This course is designed for students who want to explore nature writing--the intersection of self and the natural world. We explore how this genre combines the observational, scientific "eye" with the personal, narrative "I" through readings in non-fiction anthologies, novels and/or memoirs. Students write essays on nature and the environment that reflect different objectives within the genre, such as the political essay, the literary field study, and the personal essay. Students also keep a "naturalist's journal." Discussion of the readings is interspersed with workshop sessions. Prerequisite: Fulfills ARTS Distribution (2013 curriculum). Fulfills the EL requirement (2013 curriculum).

301. Pollution of Aquatic Ecosystems with lab. (ESP) (1.25 units)

After introducing major physical, chemical and biological aspects of the ecology of lakes, rivers and coastal waters, the course focuses on the consequences of human activities on aquatic ecosystems: cultural eutrophication, oxygen-demanding wastes, persistent toxic chemicals, acidification, oil and metal pollution, global warming, and the effects of water diversions and impoundments. Lab projects emphasize water sampling and analysis, stream assessment using biotic indices, analysis of contaminants in runoff and sediments, and models of phosphorus in lakes and bio-accumulation of persistent toxins. Prerequisite: ENV5 101 or BIOL 101 or GEOL 103.

302. Air Pollution. (ESP)

This course examines the sources, chemistry, transport and ecological and social impacts of major air pollutants. Our scale of study moves from global to regional to local. Issues include global climate change, stratospheric ozone depletion, urban air quality, photochemical smog, acidification and local industry. Emphasis is on consequences of industrialization and urbanization in both developed and developing countries. While primary focus is on ecological impacts, we also consider the equity issues, policy and implementation strategies for protecting air quality. Prerequisite: ENV5 101.

303. Land Use Change in the Adirondacks. (ESP)

Using the Adirondacks as a case study, this course examines current activities in land planning and the importance of historical context. Study of Adirondack history begins with 16th century information from European explorers and Native Americans. Emphasis is then placed on industrial and recreational use in the 19th century. The course highlights formation of the State Forest Preserve and the Adirondack Park, and regulations governing private land use. Study of the present utilizes political theory such as internal

colonization and coreperiphery. The course employs local examples through discussion and field trips. Prerequisite: ENVS 101. *Also offered as ODST 203.*

### 306. Environmental Chemistry and Toxicology.

This course is designed for chemistry majors and students in environmental studies who have a strong background in chemistry. It explores the sources and levels of chemical pollutants, the pathways along which they move through the environment and the toxicological effect they have on humans and other living things. Prerequisites: ENVS 101 and CHEM 221 or permission of instructor. *Also offered as CHEM 306.* Offered in alternate years, usually in the spring semester.

### 308. Environmental Economics.

JUNIORS OR SENIORS ONLY An analysis of deficiencies of the market system and existing property rights structure that generates pollution problems. This course applies the theories of externalities, public goods, the second-best, nonmarket valuation, and benefit-cost analysis to environmental policy and regulation. Alternate policy options are considered, including command-and-control and incentive-based approaches. This course discusses local environmental quality issues (such as the management of municipal and toxic waste) and global problems (such as ozone depletion and climate change that require international policy). Students learn tools of economic analysis and their application to environmental issues and problems. Prerequisite: Economics 251. Fulfills the EL requirement.

### 310. Philosophy of the Environment.

What obligations, if any, do we have towards the environment? What changes should we make in our own lives in light of those obligations? How does material consumption relate to our happiness? If we can be happy consuming less, why do so many of us continue to consume so much? How do our attitudes towards the environment reflect our social position? What is the difference between the natural and the artificial? This course examines such questions in order to come to grips with our relationship with the environment, and what these ideas mean for the way we lead our lives. Students will explore these questions in relation to the global community, to our local community, and in relation to their own lives and choices. Prerequisite: any 100-level philosophy course, or ENVS 101, or permission of the instructor. *Also offered as PHIL 310, ODST 310 and also offered through Peace Studies.*

### 318. Environmental Psychology.

This lecture-lab course studies the relationships between humans and physical environments, both natural and built. Topics include environmental assessment, attitudes and behavior toward the environment, and the psychological effects of such environmental factors as crowding, architectural design, extreme environments, pollution and natural disasters. The laboratory is required of all students. Prerequisites: ENVS 101 and PSYC 101NL or 101WL (without lab or with lab). *Also offered as PSYC 318 and through Peace Studies.*

### 319. Hydrology and Hydrogeology.

This course provides an introduction to the movement and storage of water on the Earth's surface (hydrology) and in the subsurface (hydrogeology). We discuss the fundamentals of the water cycle and hydrologic processes at the surface, the transfer of water in and out of the subsurface and the processes of groundwater flow. Human impacts upon water are also examined, including water resources, contamination, changing land-use and climate change. Prerequisite: ENVS 101. *Also offered as GEOL 319.*

### 326. Once and Future Forests. (ESP)

This course explores the magnificence of forests and trees. We study both the conservation of old-growth forests as well as the establishment of new forests, hence the title of the course – Once and Future Forest. This is an applied, field-oriented, community service, project-based course with a strong focus on the North Country. The in-class portion of the class focuses on forest and tree ecology, and the history of forest disturbance in the North Country. With the lab portion of the course, we learn and conduct a forest evaluation of a forest stand at the Living Laboratory as part of the ongoing North Country Old-Growth Program initiated in the fall of 2005 (you will conduct an inventory of a forest around your home if campus shuts down). The course deepens our appreciation of forests and trees, our awe-inspiring older brothers. Fulfills NS-L requirement. Prerequisite: ENVS 101.

### 329. Adapting to Climate Change (ESP)

This course focuses on how people – non-human and human – adapt to climate change. The course initially focuses on the impacts of climate change, such as increased temperatures, loss of sea ice, phenology change, and increased insurance costs. The course then considers how people are now adapting to these changes, how to plan for further changes, what constitutes maladaptation, options for people who live in areas proving to be uninhabitable (an area of law called loss and damage), and others who are dislocated or need to migrate. In doing so, we critically apply the concepts of resilience and vulnerability. We examine the international adaptation regime under the United Nations Framework Convention on Climate Change (UNFCCC) and then turn our attention to case studies. The course focuses on the Arctic where climate change is happening most dramatically and where the impacts are most severe. Particular attention is given to indigenous peoples living in the Arctic, but other vulnerable peoples around the world also draw our attention. The class is run as a structured seminar with significant student input based on readings, research assignments, and by paying close attention to climate change news as it emerges. Prerequisite: ENVS 101.

### 330 Ecology of Lakes & Rivers with lab.

This field course examines the biology of freshwater organisms from a community and ecosystem perspective. Class projects measure ecological conditions in a variety of regional lakes and rivers and characterize watersheds using GIS. Topics include food web dynamics, fisheries science, primary production, seasonal succession and watershed science. This course is ideal for juniors and seniors seeking field experience and advanced knowledge of aquatic ecosystems.

333. Climate Change Science, Policy and Advocacy. (ESP)

This course focuses broadly on climate change science and policy, that is, the physical causes of climate change and how humans act, or fail to act, on that knowledge. After a survey of policy-relevant climate change science in the first part of the course, our attention turns to the ways scientific knowledge, worldviews, and power affect climate change decision-making at the international level as carried out by the United Nations. The class focuses on treaties developed through the United Nations Framework Convention on Climate Change (UNFCCC), such as the Kyoto Protocol and Paris Agreement, and we pay close attention to the ongoing negotiations of the UNFCCC. The class incorporates attendant critiques to climate policy and incorporates emergent climate change news as it happens. Prerequisite: ENVS 101. *Also offered through Peace Studies.*

334. Environmental Communication.

This course focuses on how competing discourses define our relationship to the natural world, frame environmental problems, and argue for public action. We will compare the environmental rhetoric of naturalists, scientists, policy makers, and activists and trace an American history that gave birth to the genre of nature writing. Students will use a blend of theoretical frameworks, research methods, and practical applications to analyze and produce written, visual, and oral texts. There will be a focus on historical naturalist essays as well as more recent pieces in environmental communication, such as popular science readings and advertisements. Students will be asked to keep a nature journal, respond to readings, apply theoretical lenses to texts and visuals of their choosing, present on related topics, and participate in class discussions. This course fulfills the RI requirement for the PCA major. Fulfills the EL requirement.

336. Living Lab ENVS Practicum with lab. (ESP)

This course will offer an in-depth and project-based exploration of a specific environmental topic or topics. Topics will vary by the semester, but each will entail an experiential and place-based learning approach. Through individual and/or group projects, students will research, assess, design, and/or implement strategies that inform or address current environmental issues. Course themes may include renewable energy, climate adaptation, recreation, environmental policy, restoration, forestry, biodiversity conservation, agroecology, or food systems. The course will often utilize St. Lawrence's Living Laboratory, a unique working landscape that provides ample opportunities for experiential learning. Counts as ESP. Pre-req ENVS 101.

343. Ecology and Political Thought.

Ecology reminds us that our activities are embedded within natural systems. What is the significance of this fact for politics? This course examines how various actors, such as citizens, consumers, social movements, scientific experts, and governmental agencies, conceptualize the relationship between humanity and the natural world. We will evaluate the merits and shortcomings of a variety of approaches to environmental politics, including survivalism, sustainable development, deep ecology, ecofeminism and the environmental justice movement. The course does not satisfy the department's major requirement in political theory. Prerequisite: GOVT 206 or permission of instructor. Prerequisite: ENVS 101. *Also offered as GOVT 343.*

346. American Literature and the Environment.

This course explores the relationship between American culture and the natural environment through the lens of literary expression. We will study the evolution of environmental aesthetics from the colonial period through the Romantic era and into the twentieth century. Students will draw upon the insights of environmental history and apply them to literary analysis. The course will generally take shape around a particular theme (e.g., the history of frontier settlement, the politics of wilderness preservation, Adirondack literature, Arctic/Antarctic exploration, animal studies, environmental justice movements, or the desert/ocean aesthetic). Prerequisite: ENG 250. Meets the EL requirement. *Also offered as ENG 346.*

349. Outdoor Recreation and Public Land. (ESP)

Land managers are often charged with the contradictory responsibilities of allowing for an unconfined recreation experience while simultaneously maintaining a high degree of resource protection. This course is an interdisciplinary investigation into the field of outdoor recreation management. Emphasis is given to wildland recreation, although activities and events in urban contexts are also explored. The course examines biophysical and social science used to inform outdoor recreation management. Examples of contemporary issues are drawn primarily from US National Parks, although other federal and state public lands are often integrated. Prerequisite: ENVS 101.

351. Internships in Environmental Studies.

Student-arranged study with an environmental organization. The internship comprises three parts: contact with daily operations; intensive work on one particular project; and extensive reading in appropriate areas. May be elected only after submission of a written proposal during the prior semester and approval by core faculty of environmental studies. A letter of support must be received from the sponsoring organization. Prerequisites: ENVS 101 and permission of instructor.

352. Contemporary Literature and the Environment.

A study of the contemporary literary response to rising national interest in the natural world and rising awareness about the danger to natural resources. Readings are predominantly in prose (novels and essays), with some poetry included. Among the questions the authors ask: as we approach the natural world, how can we move beyond metaphors of dominion? What are the biases of gender, geography and culture that we bring to our inquiry? What is the relationship between the human and the “natural”? What does it mean to fully invest ourselves in our local environment? Prerequisite: ENVS 101. *Also offered as ENG 352 and through Outdoor Studies.*

360. Agriculture and the Environment. (ESP)

This course introduces students to the ecological, economic and social dimensions of agriculture, both food and fiber. We critically examine modern, large-scale, industrialized agriculture—how it has arisen and how it affects land, water, biodiversity and human communities—and analyze whether it is sustainable. We then evaluate a variety of models that might represent more sustainable systems, including Native American, permaculture, urban, regenerative, organic and regional food systems. Students visit several local farms and gain hands-on experience in the gardens at the Ecological Sustainability Landscape. Prerequisite: ENVS 101. *Also offered through Peace Studies.*

361. Research Seminar in Environmental Studies.

Faculty-directed research designed for small groups of advanced students. The focus is often on environmental problems of northern New York. Topics are usually defined in response to needs identified by local communities. The course draws together the expertise of students from different majors. Basic concepts and methodologies of field research are applied in practice. Prerequisites: ENVS 101 and permission of instructor.

332. Recreation Policy and Planning: Environmental Impacts and Implications. (ESP)

Outdoor recreation can, and often does, have an adverse effect on the environment. This course investigates impacts of recreation on multiple resources and considers their importance in the context of federal law and land management policies. Particular attention will be given to the National Environmental Policy Act, although specific rules and regulations governing natural, cultural, and experiential resources will be examined. Students will explore potential impacts from various recreation activities and consider how they may be managed in light of relevant policy. At the course's conclusion, each student will be expected to present a case study describing: 1) the resource, experiential, and managerial dimensions of a specific area, 2) potential impacts from recreation activities in that area, and 3) multiple alternatives for managing those impacts. Prerequisite: ENVS 101.

365. Rethinking Population, Health and Environment.

Rethinking Population, Health and Environment. This course addresses complex interrelations among and between population, health and the environment in an increasingly interdependent world. The aim is to provide theoretically and empirically grounded understandings of the historical and contemporary evolution of various population dynamics, including demographic change, public health, diseases, human migration, urbanization, disasters, and population-environment patterns. The course employs an interdisciplinary approach to identify critically how economic, political, cultural, social and environmental factors operating across multiple scales (local to global) shape the intersection of population, health and the environment. Through specific case studies, the course also explores current challenges in global health, population policies around reproductive rights, health systems and reforms, environment change, and emerging issues around equity, social, and environmental justice. This course may be counted toward the major in Conservation Biology. Fulfills EL Requirement. Counts toward Public Health minor.

369. Ecological Restoration with lab. (ESP)

This course examines how the principles and techniques of restoration ecology are used in planning and implementing projects in degraded landscapes. An introduction to restoration ecology, conservation of biological diversity, ecological integrity, and sustainable land-use are major themes. Students learn field and analytical techniques pertaining to ecosystem management. Comparisons of restoration frameworks through case study analysis illustrate modeling and analytical techniques for the restoration field. A major course project gives experience in restoration planning and implementation. Where possible, guest lectures by professionals or stakeholders augment student experience. Cross-listed with Conservation Biology major. Prerequisite: ENVS 101.

### 370. Global Amphibian Decline with lab. (ESP)

An introductory theoretical case-based and practical field studies course examining a global perspective on the ecology and conservation of amphibians. Lecture topics include: key aspects of amphibian ecology, habitat destruction, environmental contamination, introduced species, infectious diseases, over-exploitation, and climate change. Approximately 6 hours of night-time field studies are dedicated to learning amphibian survey techniques and collecting geospatial movement data to investigate regional threats to local amphibian species. Fulfills NS-L requirement. Cross-listed with Conservation Biology major. Pre-requisite: ENVS 101.

### 372. Transboundary Wildlife Conservation. (ESP)

North American wildlife can face a perilous existence, particularly across vast complex landscapes, or when protection changes across political boundaries, or when well-intended policy is limited. Bridging science, policy, and ecology, transboundary wildlife conservation-for example, coordination between Canada, US, and Mexico-is an emerging concept in environmental governance with an eye toward aligning protection policies. Today, the plight of biodiversity is strengthened by participatory wildlife conservation involving stakeholders and stewardship initiatives. This course will explore ecological and cultural values as viewed within and beyond political borders, protected areas, and private land using transboundary wildlife case studies. The enigmatic Gray Wolf has had a dramatic chronicle across North America including persecution, protection, and delisting and will be a primary course case study. Students will select a transboundary species and develop a historical 'story-board' spatial analysis for presentation. Written research papers will include a scientific literature review on a transboundary species ecology and a comparative policy paper. A final synthesis will be required and developed as a diagrammatic conceptual model. Counts towards the CLAS, Native American Studies minors. Pre-requisite: ENVS 101.

### 375. Theatre Sustainability & Natural World.

This course encourages students to consider the ways in which the discipline of theatre engages with the natural world and the ethical concerns around how humans interact with the environment. By doing so we will reveal how theatre as an art form relates to other disciplines such as environmental sciences, politics, and government. By reading plays with ecological themes, students will have an opportunity to consider how playwrights have imagined our role within the natural environment, as well as how playwrights have also attempted to use theatre as an artistic platform for advocacy around environmental issues. We will also consider how the theatre as a discipline impacts the natural world through traditional production practices, some of which may be considered wasteful and harmful to the environment, as well as to consider ways in which artists can create more sustainable artistic practices. This dual focus on the study and creation of theatre provides students with multiple opportunities to engage with theory and practice of theatre that engages with ethical issues surrounding theatre, sustainability, and the natural world. Those taking the course at the 4000 level will have added mentoring obligations and an additional assignment. Part of Sustainability Program- Fulfills the ARTS distribution and EL requirement 379.

### Renewable Energy Systems. (ESP)

Renewable energy technologies can play a key role in slowing global climate change by reducing greenhouse gas emissions as countries transition away from fossil fuels. The goal of this course is for students to have an in-depth understanding about how renewable energy technologies blend into the

greater energy infrastructure of the U.S. and world. In addition to reading about the various renewable energy options, significant class time is dedicated to field trips, labs, or other hands-on learning activities. In general, this class will cover the following areas within renewable energy: solar power, wind power, bioenergy, hydropower, and efficiency. The class is designed for students that have no prior knowledge of renewable energy. Prerequisite: Prerequisite: ENVS 101 or permission of instructor.

#### 380. Tropical Ecology.

A seminar course based on current research in tropical biology. Emphasis is on the structure, function and biology of tropical organisms and ecosystems. Lectures include South American, Australasian and African tropical ecosystems. The course addresses the role of plant-animal interactions, mutualisms, sustainable development, conservation measures and the roles of indigenous cultures in tropical ecosystems. Prerequisites: ENVS 101 and 221. *Also offered as BIOL 380.*

#### 384. Natural Resource Economics.

JUNIORS OR SENIORS ONLY This course complements Economics 308 (Environmental Economics). Standard economic approaches to problems of natural resources are presented and criticized from a variety of different perspectives to give students a deeper appreciation of the role of economic analysis in coping with natural resource scarcity. Specific topics include economics and population growth, economics and environmental ethics, ecological economics and sustainability, biodiversity and water resources. Prerequisites: Economics 200 and 251.

#### 432. Animal Behavior with lab.

This lecture-laboratory course examines various forms of behavior as they appear throughout the phylogenetic scale. The roles of evolution, genetics and the neural system in the control of diverse behaviors from feeding to territoriality and human aggression are considered. Counts toward the neuroscience major (behavioral track). PSYC-101WL OR PSYC-101NL

#### 4000-4999. Special Topics.

The content of each course or section of these 300-level special topics courses varies and will be announced each semester.

## European Studies

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Minor offered.

Visit the European studies webpage by linking directly to it from the Majors and Programs page at <https://www.stlawu.edu/offices/european-studies>.

### Study Abroad

Participation in study programs in Austria, the Czech Republic, Denmark, England, France, Italy, and Spain, as well as through ISEP (the International Student Exchange Program), provides an excellent opportunity to design a European Studies minor that combines on-campus courses with classes taken abroad, research projects undertaken abroad, and immersion in a European culture. Students should consult with the coordinator about a European studies minor that incorporates study abroad. See also the Center for International and Intercultural Studies programs website:

<https://www.stlawu.edu/offices/ciis>.

### Global Studies

Students interested in pursuing a global studies major may include courses cross-listed with European studies to meet one of the area studies requirements.

### Minor Requirements

The minor consists of 6 courses in the following areas:

I. Introduction to European Studies.

A course in European Studies or cross-listed with European Studies. See the website list for general reference, though this list is not complete. The course should focus on the country of interest, or Europe in general: <https://www.stlawu.edu/european-studies/minor-requirements>.

II. Elective Courses.

Three courses. Any cross-listed course in European Studies and a maximum of four courses taken abroad may count towards the minor. The language course taken abroad can only be counted once as an elective. Students are therefore encouraged to take a language course in a European language before going abroad, or a second language course abroad or upon return. Questions should be directed to the program coordinator. Many courses taught on St. Lawrence's European study programs are included. Consult the program website or the coordinator for a current list of these courses. To ensure breadth, students may count no more than two courses from a single department or program for the minor. Frequently, special topics courses offered in various departments may count as program electives. Students should consult the coordinator about the appropriateness of courses not listed in the current *Catalog*.

III. Language Study.

Any European language study course other than English taken at SLU.

# Finance

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Major offered.

Note: Students may choose to double major in Finance and Business and the Liberal Arts but may not pursue a double major in Economics and Finance.

Visit the economics department webpage at <https://www.stlawu.edu/offices/economics>.

The academic field of finance is a positive science which applies formal theory to empirical evidence using the scientific method. Finance is a specialized branch of economics and is built upon both microeconomic and macroeconomic theories as applied to financial markets and firm financial structure.

## Major Requirements

ECON 100. Introduction to Economics. (1 unit)

ECON 200. Quantitative Methods (1.5 units)

ECON 251. Intermediate Microeconomic Theory. (1 unit)

ECON 252. Intermediate Macroeconomic Theory. (1 unit)

ECON 313. Investments

ECON 3XX (Currently special topics, ECON 4013). Corporate Finance

ACC 203. Financial Accounting

ACC 204. Managerial Accounting

At least 2 electives in finance and 2 additional electives from finance or economics (or GOVT 316. Business & Ethics)

Majors must maintain a grade point average in their finance major courses of at least 2.0 and must earn a grade of at least 2.0 in ECON 251, ECON 252, and ECON 4013 (Corporate Finance). A grade of P (pass) in ECON 251, 252 or 4013 does not count as a 2.0.

Students interested in majoring in Finance should take ECON 100 (Introduction to Economics) as early as possible, preferably during their first year. Credit for ECON 100 is granted to students who earn a grade of 4 or 5 on the College Board's Advanced Placement Examinations in microeconomics or macroeconomics.

As this is a recently-added major, students interested in majoring in Finance should speak to a professor in the Economics Department no later than fall semester of their sophomore year about how to successfully progress in this major.

# Gender and Sexuality Studies

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Minor offered.

Visit the gender and sexuality studies webpage by linking directly to it from the Majors and Programs page at <https://www.stlawu.edu/offices/gender-and-sexuality-studies>.

## Minor Requirements

Below are the requirements for the minor in gender and sexuality studies.

### Required Courses (5)

1. One of the following courses: GNDR 103 (Gender and Society) *or* GNDR 201 (Gender in a Global Perspective) *or* GNDR 280 (Sexuality, Society and Culture).
2. GNDR 290 (Gender and Feminist Theory).
3. A methods course or an additional upper-division theory course: GNDR 301 (Masculinities) *or* GNDR 315 (Feminist Political Theory) *or* GNDR 334 (Feminist Philosophy) *or* GNDR 369 (Making Sexualities).
4. Electives:
  - a) Minors must take two additional gender and sexuality studies or cross-listed electives, at least one of which should be at the 300 or 400 level (these courses may also count toward the praxis requirement if they meet the criteria listed below).
  - b) No more than one of these elective courses may be taken in any single department other than gender and sexuality studies.

\*Elective courses are approved for cross-listing by the gender and sexuality studies advisory board, and are listed in the Course Catalog with both gender and sexuality studies and the relevant department or program (i.e., anthropology, art and art history, Canadian studies, English, global studies, government, history, world language, cultures, and media, performance and communication arts, philosophy, psychology, religious studies and sociology).

### Praxis Requirement

In addition, students must engage in two praxis projects wherein they use what they have learned in the minor to foster social change. One project can be met on campus through a course, but the other must be met off campus.

#### A. On Campus Options

- *Courses that will meet the on-campus requirement are:* GNDR 280 (Sexuality, Society and Culture) or GNDR 335 (Sex Talk) or GNDR 352 (Transnational Feminist Activism).
- Students may also petition to have a Community-Based Learning course count: work in the community must focus on issues of gender and sexuality.
- Students can also meet this requirement with activist work on campus by organizing or co-organizing at least three events for any of the following theme houses and community groups: the Women's Resource Center, La Casa Latina, Carefree Black Girls, Spectrum or for the Advocates Program. Students who choose to meet the requirement through direct action must include a two-page typed statement chronicling their work on campus and how it speaks to the minor.

## B. Off Campus Options

- Research fellowships, internships or externships, off-campus study, community-based learning or community organizing. Students must include a one-page typed statement chronicling their experience and how it speaks to the minor.

## Courses

Because gender and sexuality studies is interdisciplinary, many of its courses are taught in several academic departments. These courses are approved by the advisory board and are listed on APR 2.0 with both gender and sexuality studies and the relevant department(s). Students are advised to consult each semester's *Course Catalog* to review the current offering of gender and sexuality studies cross-listed elective courses. Additionally, *Special Topics* electives are offered most semesters.

### 103. Gender and Society.

This interdisciplinary course examines gender roles, identities and institutions through their intersections with race, ethnicity, class and sexuality.

### 201. Gender in Global Perspective.

Gender constructs cultural, political and socio-economic relations across class and racial lines in the Western world and throughout the rest of the world, although the concepts and structures that define gender roles can and do differ significantly. This course examines the global constructions of gender through examples chosen from indigenous and diasporic communities in Asia, Africa and the Americas; discusses the variable impacts that these constructions have had particularly on women's lives; and introduces theories of transnational feminism. *Also offered through Global Studies and Peace Studies.*

### 224. Global Advocacy for Women's Sexual and Reproductive Health

Global advocacy for women's sexual, reproductive health and rights Women are not waiting to be saved or given their rights, they act on their own behalf and advocate for others. Women-led movements have successfully changed laws and attitudes about the causes they represent and sometimes victory is denied, delayed, or arrives disguised in unexpected packages. This course will examine advocacy for women's sexual and reproductive health and rights. Students will work in groups to identify, design and implement an advocacy project to address a sexual, reproductive or rights concern on SLU campus. Project outcomes will be discussed and presented in class.

### 272. Coming-Out Stories.

Among the many questions this course addresses: Are identity politics in contemporary North American culture passé, boring and irrelevant? How does the critical literature help us better engage the autobiographical pieces that lesbians write? How do lesbians negotiate the rugged terrain of feminism? How do African American lesbians choose the oppression to which they hold allegiance? The purpose is not simply to compare and consider the profundity (and often trauma) of the experience of "coming out," but also to define terms we think we understand or know.

280. Sexuality, Society and Culture.

An exploration of the cultural facets of our sexuality and how we come to understand sexuality in our everyday lives. Are sexual feelings biological, or do they emerge from particular historical and social formations? How does sexuality come to operate as something that is just natural? What does love have to do with it? How has the concept of sexuality shifted from sex acts to sexual identities? How is sexuality linked to race, class and gender? How is sexuality linked to the political? The answers to these questions provide a broad understanding of gender and sexuality studies. We rigorously examine the concept of sexuality through theoretical, empirical and creative frameworks.

290. Gender and Feminist Theory.

This course examines theoretical explanations of gender, gender difference and gender inequality in society. The course includes introductions to some of the questions that shape contemporary feminist theory, feminist writings in multiple disciplines and feminist movements inside and outside the academy. The course focuses on how an awareness of intersections of race, class, sexuality, gender and ethnicity is vital for disciplinary and interdisciplinary study in feminist theory. Theoretical works are drawn from the humanities, arts and literature and the social sciences. Prerequisite: GNDR 103. *Also offered as PHIL 290.*

301. Studies in Masculinities.

This course calls on students to investigate their own lives in relation to historically and locally dominant prescriptions of what men and women “should” be. Combining readings of “great books” with a wide range of material from the burgeoning field of critical studies of masculinity, the course also includes a field research methods component that enables students to design and carry out creative research projects into the local gender systems in which they attempt to forge their own identities. *Also offered through African American Studies.*

315. Feminist Political Theory.

This course will introduce you to some of the ways by which feminists draw from and transforms political theory, as well as how political theory may inform or help us to understand feminist claims and activism. We will read feminist analysis from the 1980s to the present. Through our readings, we will explore concepts that are central to political theory (such as freedom, agency, citizenship, and rights) through feminist lenses, and explore how these new ways of thinking can help us to envision society in new ways. We will also explore the implications of theory for public policy and political activism. It will be important that students read closely and carefully, and that they are prepared to engage in conversation. Prerequisites: Students should have taken either Political Theory (GOVT 206), Gender and Feminist Theory (GNDR 290), or have permission from the instructor to enroll in this course.

318. Gender in the Middle East

Gender constructs cultural, political, and socio-economic relations across class and racial lines in the West and throughout the rest of the world, although the concepts and structures that define gender roles can differ significantly. The aim of this course is to offer an overview of the key issues in the study of gender in the Middle East. It will provide a specific area focus for students of gender and global

studies while providing a gendered understanding of prevailing discourses, ideologies, social practices, and trends for those students interested in Middle East societies, laws and politics. The course is interdisciplinary in scope; therefore the readings and theoretical underpinnings range from history and sociology to anthropology, political science, and media studies, including contracting movies and documentaries made in the Middle East and those made in the West about the Middle East. Prerequisite: GS-102 or GNDR-103.

334. Feminist Philosophy.

An introduction to some of the questions that shape feminist philosophy today. What connections are there between feminist philosophy and feminist writing in other disciplines and feminist movements inside and outside the academy? Does feminist philosophy transform traditional philosophical discourse and the academy? The course focuses on how an awareness of intersections of race, class, sexuality, gender and ethnicity is vital for disciplinary and interdisciplinary study in feminist philosophy. *Also offered as PHIL 334.*

335. Sex Talk.

Sex Talk is an examination of dominant discourses around gender, sex and sexuality with the objective being to have students not only critically analyze these discourses but to interrupt their creation in order to foster counter discourses that challenge hegemonic norms, including misogyny and homophobia. We will explore youth culture and university cultures, and examine how these cultures create, are created by, respond to, and challenge patriarchy, hegemonic masculinities and femininities. The course culminates in students designing and delivering peer education programs/performances on campus. Also offered as PCA 335. Permission of instructor required.

352. Transnational Feminist Activism.

This course examines social, economic, political and cultural projects throughout the world organized by women to address the concerns of women. We investigate specific groups that identify themselves as feminist as well as the various feminisms that define them. Equally important are those groups that reject or challenge the label of feminism as a Western and therefore imperialist or neo-imperialist ideology and present alternatives for women's collective action. Finally, we explore the possibilities and practices of transnational or women's global activism by participating in a community-based learning project with a local organization engaged in feminist activism. *Satisfies one praxis requirement.*

367. Feminist Post-Colonial Theory.

Postcolonial theory addresses issues of identity, culture, literature and history arising from the social context of colonization, resistance to colonization, liberation from colonization and the formation of new nations. It crosses the boundaries of the social sciences and humanities in its approach to theory and analysis of the discourses used to constitute colonial and postcolonial subjects. We begin with some classic texts of postcolonial theory before moving to a focus on specifically feminist debates and texts within postcolonial studies. Literature and film are used in dialog with theoretical texts to examine questions about gender and women's issues in various societies. *Also offered as GS 367, ENG 367 and PHIL 367.*

### 369. Making Sexualities.

Sexuality culturally operates as a central trope by which we come to “know” ourselves as sexed people (that is, female or male) and how we come to understand our desire. In this course we unpack sexuality from a cultural and gendered perspective — we discuss how we have come to know sexuality culturally, materially and in our everyday lives. In doing so, we explore topics such as the invention of modern notions of sexualities, queer identity, love, pornography and sex work through reading, writing, artistic expression and research. This course is reading and writing-intensive.

### 479,480. SYE: Internships.

Students are required to spend eight hours per week in an internship at an agency that deals with gender-related issues and problems, such as sexual identity, domestic violence, sexual assault, the feminization of poverty, and conceptions of masculinity and femininity among students. Students reflect on their experiences in a journal that applies gender studies concepts to the experiences, attend bi-monthly service learning workshops with other campus interns, and prepare a research paper related to issues relevant to the internship. Prerequisite: GNDR 103 and permission of the instructor.

### 489,490. SYE: Independent Study.

Individual study of a topic, which must be approved by the gender and sexuality studies advisory board in the semester prior to be undertaken. Independent study may be used to satisfy the sixth course research requirement. Prerequisite: GNDR 103 and permission of the instructor.

## Geology

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Major and minor offered.

Visit the geology department webpage at <https://www.stlawu.edu/offices/geology>.

### Major Requirements

#### Core Courses (9-10.5 units)

Students entering the geology major take the following nine to eleven courses to meet minimum department requirements for graduation with the Bachelor of Science degree in geology:

- 103. The Dynamic Earth **or** 110. Environmental Geology **or** 115. Oceanography.
- 104. Historical Geology.
- 203. Mineralogy.
- 206. Invertebrate Paleontology.
- 211. Geomorphology.
- 216. Sedimentology **or** 316. Carbonate Sedimentology **and** 320. Regional Field Studies: Geology of the Caribbean.

302. Igneous and Metamorphic Petrology.

350. Structural Geology.

Elective (1) at the 200 or 300 level

None of these required core courses will be accepted toward the major if taken pass/fail. Normally, 200-level courses are appropriate for sophomores, 300-level for juniors and 400-level for seniors.

Students should consult the course descriptions in this *Catalog* for information on prerequisites and sequencing of both required and advanced courses.

### **Required Cognates (3.5 units)**

Same as for Geology majors

Majors are required to take at least one semester of the following courses:

Chemistry

103. General Chemistry. *and*

Mathematics

135. Calculus. *and*

Physics or Biology

151. University Physics. *or* 101. General Biology.

It is highly recommended that the two-semester sequence of each be completed by both geology and environmental studies–geology majors. Career and graduate school options may be limited otherwise.

### **Suggested Courses**

No student is permitted to take more than 14 units in any one department.

Directed studies and senior honors thesis options are available to seniors on an arranged basis with geology faculty members. Directed studies and senior honors thesis are not counted toward the major but are counted for SYE credit.

It is strongly recommended that students who anticipate graduate study or a professional career in geology also take statistics and geographic information systems (GIS), and attend one of the many summer field camps.

### **Combined Major in Environmental Studies–Geology**

A combined environmental studies–geology major is available. Please refer to the entry for Environmental Studies in this Catalog for details.

### **Honors and Senior Thesis**

Senior thesis study is undertaken voluntarily by students who wish to conduct original research in a close working relationship with one or more geology faculty members. (See also Honors in the

Curriculum section of this *Catalog*). A 3.5 GPA upon completion of all courses in the major and the completed senior thesis chaired by a member of the geology faculty are both needed for the distinction of honors. The senior thesis course (GEOL 489, 490) may be taken regardless of a student's average in the major if permission of a faculty member is obtained. Thesis work is expected to lead to a finished written product (thesis) for appropriate credit. The department encourages its students to consider a senior thesis as part of a capstone experience; this should be undertaken only after careful discussion with faculty advisors. Guidelines for the thesis are available from the department chair.

## Minor Requirements

Students with a general interest and who wish to have a basic understanding of the Earth and its processes, or who have a strong interest in a particular aspect of geology or earth science teaching and want to learn more about the subject, may minor in geology. There are several areas of potential concentration, and students should consult with their advisor in designing a minor.

103. The Dynamic Earth *or* 110. Environmental Geology *or* 115. Oceanography.

104. Historical Geology.

And four additional one-unit courses at the 200 level or above are required in all cases.

## Courses

103. The Dynamic Earth.

An introduction to the study of the Earth intended for students with little or no previous exposure to geology or other science. The course examines the materials from which the Earth is made and the forces that govern their distribution; it explores the formation, abundance and distribution of economically useful earth materials (oil, natural gas, coal, strategic metals, precious minerals, water resources) and examines natural hazards such as volcanoes, earthquakes, radiation exposure and floods. Laboratory work gives students hands-on and field experience with rocks, minerals and many kinds of maps.

104. Historical Geology.

An introduction to stratigraphic principles and the methods by which we can reconstruct geological events that have shaped the modern Earth. Where have modern ideas about the Earth come from? How do geologists unravel the history of the Earth? What has happened in the Earth's history? The course examines fundamental controversies that have faced geology throughout its history as a science, reviews in detail the methods that geologists use to determine past events, and examines evidence recorded in rocks and fossils during the past 4.6 billion years to build an understanding of Earth's history.

110. Environmental Geology.

Environmental geology is a multidisciplinary field of applied science that involves the study of the interaction of humans with the geologic environment including the biosphere, the lithosphere, the hydrosphere, and the atmosphere. The field of environmental geology includes, but is in no way

restricted to: 1) the study of the structure and processes of the earth, mineral, and rocks, especially those that are near-surface or have some significant effect upon humans, 2) the study of natural hazards and disasters, including defining and mitigation (or adaptation) of human exposure and threat, 3) managing industrial and domestic waste disposal and minimizing or eliminating effects of pollution, and 4) managing safe and environmentally responsible stewardship of geological resources, including minerals, fossil fuels, and water and land use. This course is designed to give the student basic understanding of the processes and materials of the earth and relate these concepts/products to human activities. *Also offered as ENVS 110.*

112. Global Climate.

Climate is perhaps the single most important and pervasive factor controlling global ecosystems and human well-being. This interdisciplinary course examines global climate from a historical perspective, beginning with the formation of the solar system and continuing through geologic time to the present. Topics include the development of the atmosphere; the workings of the global “heat engine” of atmosphere, oceans and continents; evidence for past climate change; causes of global climate change; the effects of climate change on human evolution; and the effects of human evolution on the global climate system. *Also offered as ENVS 112 and PHYS 112.*

115. Oceanography.

This broad introductory course explores the oceans of the world, the living organisms of the ocean and the vast mineral wealth of the ocean floor. The course explores oceanography through discussion of elementary scientific concepts in the context of geology, biology, chemistry and physics. Topics include the origin of oceans; the composition and history of seawater; oceanic currents, tides, waves and beaches; the sea floor; plant and animal life in the sea; oceanic resources and food; and marine pollution.

117. Dynamic Ocean Online. *(Summer only; online only)*

This online course is an introduction to geological and physical oceanography which provides students with an understanding of the marine environment and natural and human impacts on it. Topics include ocean in Earth system, plate tectonics, marine sediments, atmosphere and ocean, currents, waves and tides, coastal ocean and shoreline processes. It also includes study of oceans and climate change, ocean’s role in global warming, and ocean acidification.

120. Roadsides and Rivercuts: North Country Landscapes through Geological Field Trips.

This special, field-intensive geology course will help you understand and appreciate the geological background of northern New York, from Lake Ontario to Lake Champlain, including the Adirondacks through a synergistic combination of in-class lectures and field-oriented lectures and laboratories. In-class lecture periods will be 3 hours/day/twice weekly (M&W) and cover topics germane to the following day’s field-oriented lectures/labs. The twice-weekly (9 hours/day, T&H) field trips will focus on various components of this landscape: landforms, rock outcrops, settlement (including industrial development and mines), energy supply systems, etc. You will learn to collect, record and identify the

minerals, rocks and glacial materials that form the basis of this environment and the processes that cause them.

203. Mineralogy.

An introduction to the nature of the crystalline state as displayed by the common rock-forming minerals through their physical and chemical properties. Topics include symmetry and its graphical representation; the relationship between crystal morphology and internal structure; hand-specimen description and recognition; mineral phase equilibria and mineral origins; economic uses; and an introduction to petrology and such analytical tools as the petrographic microscope and x-ray diffractometer. Prerequisite: GEOL 103 or 110.

206. Invertebrate Paleontology.

This course focuses on principles of invertebrate paleobiology, morphology and taxonomy as they are applied to the study of fossils. All macro-invertebrate groups having a significant fossil record are examined. Laboratory work centers on techniques employed in fossil preparation, on recognition of taxa from fossil material, and on the stratigraphic and evolutionary significance of invertebrate fossils. Oral and written presentations on paleontological issues are expected of each student as an introduction to the literature of the discipline. Participation in a field trip is expected. Prerequisite: GEOL 103 or 110, or GEOL 104, or permission of the instructor.

207. Paleoecology.

The challenge of understanding the organizing principles, the evolution of and the functioning of ecosystems of the Earth is the essence of this course. Earth is entering a time of massive extinction, which happens first to species and then to communities and ecosystems. In paleoecology one aim is to understand how, why and when ecosystems collapse by studying the geologic record of such collapse events in the past. Such understanding may reveal our future. Techniques employed in these studies blend theory with application. The course is appropriate for students who have some paleontology or biology experience. Offered every other year. Prerequisite: GEOL 206 or permission of instructor.

210. Optical Mineralogy.

This course involves a study of the nature of light in its interaction with crystalline material. Specifically, it studies the optical characteristics and properties of minerals and how minerals may be identified using the petrographic microscope. Participants gain experience in microscopic mineral identification and in the preparation of rock thin sections. Offered occasionally. Prerequisite: GEOL 103 or 110.

211. Geomorphology.

Geomorphology, literally "earth-shape-study," is the study of the landscape, its evolution and the processes that sculpt it. The purpose of this course is to enhance the student's ability to read geologic information from the record preserved in the landscape. This is achieved through understanding the relationship between the form of the Earth's surface and the processes that shape that form. Students combine quantitative description of the landscape with study of landscape-shaping processes into a

comprehensive investigation of the dynamic landscape system including glaciation, hills, rivers, mountains and plains. Prerequisite: GEOL 103 or 110. *Also offered as ENVS 211.*

#### 216. Sedimentology.

This course explores the processes of sedimentation and their products in different depositional environments. It covers characteristics and origins of sedimentary rock types; processes that erode, transport and deposit sediments; and postdepositional modification. Emphasis is on modern depositional environments and how their study can help us better understand ancient depositional environments. The course also covers the principles of stratigraphy and reconstruction methods of sea level and paleoclimate. Field and laboratory analyses, including petrography, focus on description and classification of sedimentary rocks, and on the interpretation of their origin. Field trips required. Prerequisite: GEOL 103 or 110.

#### 217. Dinosaurs.

Few groups of animals are more recognized than the Dinosauria; likewise, there are few groups about which more misinformation (pseudoscience) has been circulated. (Was Jurassic Park actually Jurassic?) In the setting of vertebrate evolution, this course presents the science of Dinosauria, explains the history of their study, and investigates the origins of the group, its paleoecology, collection techniques, morphology and taxonomy. We consider cutting-edge issues of dinosaur research (are birds simply dinosaurs with feathers?), and confront all manner of misinformation, anachronism and illusion based on dinosaur myths.

#### 241. Field Methods for Environmental Scientists.

This interdisciplinary course is intended for students interested in environmental science (e.g., environmental studies, biology, geology or chemistry majors or minors). Familiarization with experimental design and statistics and training in field techniques includes map and compass work, basic surveying, and water, soil, vegetation and faunal sampling. Introduces students to the use of Geographic Information Systems (GIS) for research in environmental science. Students acquire a working knowledge of ArcView GIS software and gain experience creating and managing GIS projects. Students interested in developing highly marketable GIS and field skills in the context of environmental research should consider taking this course. *Also offered as BIOL 241.*

#### 280,281. Directed Studies in Geology.

Semester-long studies in appropriate areas of the earth sciences may be designed in consultation with an individual instructor in the geology department. May use seminar format when appropriate. Prerequisite: GEOL 103 or 110 and permission of instructor and sophomore standing are required.

#### 3000-3999. Special Topics.

Numerous special topics course are offered annually and generally involve a field component and travel. These courses are designed to provide students with the field experience needed to be competitive for

graduate and professional positions. The content of each course or section of these 200-level special topics courses varies and will be announced each semester.

### 302. Igneous and Metamorphic Petrology.

Petrology is the study of the origin of rocks, based on detailed observation of rock characteristics (petrography) together with theoretical/experimental approaches. This course provides a review of the occurrence, characteristics and origins of the common igneous and metamorphic rocks. Areas of study include the origin and differentiation of primary magmas, common rock associations, metamorphic zones and facies, the nature of the deep crust, and use of phase diagrams in the understanding of igneous and metamorphic petrogenesis. The relationship of plate tectonics to the formation of these generally holocrystalline rocks is emphasized. Prerequisite: GEOL 103 or 110 and 203 or permission of instructor.

### 314. Glacial and Quaternary Geology.

This seminar examines the details of at least two million years of Earth history. During this period, extreme fluctuation in the climate caused great ice sheets to form and melt many times, working profound changes on the environment. The course examines the causes, mechanics and effects of glaciation in the context of long-term climatic and environmental change. Prerequisite: GEOL 103 or 110 and 211 or permission of instructor.

### 316. Carbonate Sedimentology.

Carbonate Sedimentology is an advanced course that examines carbonate sedimentology and depositional environments. The course includes field trips to several classic localities in the country. The course focuses on the temporal and spatial makeup and controls on mineralogy and constituent composition of sedimentary carbonates, and introduces students to carbonate facies, carbonate platform models, sequence stratigraphy, carbonate cycles, orbital (Milankovitch climate) forcing and porosity in carbonates as well as field and lab methods. It will provide an understanding of why no other rock type is as economically important as carbonates, major reservoirs for petroleum, base metals and potable water. Prerequisite: GEOL 103, or 110, and two 200-level geology courses.

### 318. Geotechnical Writing.

A major responsibility of all scientists, regardless of their employment, is to convey the technical results of their work to any of several audiences in a factual, informative and accurate manner. Most of this process requires particular writing skills. In geology these are combined with a wide range of graphics techniques around which text is often formed, with unique methods of reference citation and the need for careful attention to the ethics of ideas and their attribution.

### 319. Hydrology and Hydrogeology.

This course provides an introduction to the movement and storage of water on the Earth's surface (hydrology) and in the subsurface (hydrogeology). We discuss the fundamentals of the water cycle and hydrologic processes at the surface, the transfer of water in and out of the subsurface and the processes

of groundwater flow. Human impacts upon water are also examined, including water resources, contamination, changing land use and climate change. Prerequisite: GEOL 103 or 110. *Also offered as ENVS 319.*

320. Regional Field Studies. (0.5 units)

Field-based studies form the core of geological inquiry. The purpose of this course is to enrich students' understanding of the process of conducting geological research in the field. The course consists of on-campus trip preparation and data analysis and reporting, and a field trip lasting approximately two weeks. Field trip locations and topics vary. Students may be responsible for some costs. Prerequisite: GEOL 103 or 110, or permission of instructor.

340. Conservation Paleobiology

This course introduces the field of Conservation Paleobiology. The fossil record provides us with baseline data and insights in processes on temporal scales not available to modern ecologists. We learn about new and exciting ways to use this type of data to inform modern conservation efforts. This class is a showcase demonstrating the importance of the geological past to manage for our future. During this course, we will practice reading, understanding, and discussing scientific primary literature. Prerequisite: GEOL 103 or 110 or 104 or BIO 101 or permission of instructor.

350. Structural Geology.

The deformation of rocks through brittle and ductile processes is the focus of structural geology. This course examines how forces such as those associated with plate tectonics and mountain-building are recorded in rocks on the regional, outcrop and microscopic scale. The genesis, recognition and classification of structures such as folds, faults, joints and microstructures, as well as the mechanical behavior of rocks and stress and strain are studied as important components in deciphering the tectonic and deformational history of an area. The laboratory emphasizes application of theory to field problems. Prerequisite or co-requisite: GEOL 103 or 110 and 203 or permission of instructor. *Also offered through Outdoor Studies.*

362. Geochemistry.

Geochemistry is the study of the distribution, concentration and cycling of the elements in Earth materials. The course explores the composition and origin of the solar system and Earth's lithosphere, hydrosphere and atmosphere. It focuses on the tools utilized by geochemists, including major, trace and rare earth element analyses, stable and radiogenic isotopes, geochronology, and sampling methods and retrospective studies, and introduces new and emerging concerns in environmental geochemistry. The use, misuse and presentation of chemical analyses are explored in detail. Prerequisites: GEOL 103 or 110. and 203, CHEM 103 and 104 or 105, or the permission of the instructor.

### 380, 381. Directed Studies in Geology.

Semester-long studies in appropriate areas of the earth sciences may be designed in consultation with an individual instructor in the geology department. May use seminar format when appropriate. Permission of instructor and junior standing are required.

### 4000-4999. Special Topics.

Numerous special topics courses are offered annually and generally involve a field component and travel. These courses are designed to provide students with the field experience needed to be competitive for graduate and professional positions. The content of each course or section of these 300-level special topics courses varies and will be announced each semester.

### 415. Tectonics.

A comprehensive overview of the theory of plate tectonics. The historical development of the theory is reviewed, considering in detail the contributions of continental drift, geosynclines, apparent polar wandering, sea floor spreading and geomagnetic reversals. Current interpretations of the plate tectonic theory are discussed in relation to rock assemblages, geophysics and paleogeographic reconstructions. There is significant emphasis on the nature and origin of orogenic belts. Offered occasionally. Prerequisite: GEOL 103 or 110.

### 489, 490. SYE: Directed Studies in Geology.

Semester-long studies in appropriate areas of the earth sciences may be designed in consultation with an individual instructor in the geology department. May use seminar format when appropriate. Permission of instructor and senior standing are required. Counts for SYE credit. Prerequisite: permission of instructor.

### 498, 499. SYE: Senior Thesis.

The senior thesis is an extended application of a student's geological background toward research of an original nature. It involves posing questions, developing hypotheses, conducting field and/or laboratory work, applying scholarship and library research, interpreting results and compiling those results into a finished thesis for submission to the department. Completion of Senior Thesis may lead to graduation with honors (see Honors in the Curriculum section of this *Catalog*). Guidelines and deadlines for thesis preparation should be obtained from the department chair. Counts for SYE credit. Prerequisite: permission of instructor.

## Geology–Physics

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Interdisciplinary major offered.

More information on this interdisciplinary major can be found at <https://www.stlawu.edu/offices/physics/geology-physics>.

Students with an interest in geophysics may prepare for graduate study in that field by choosing the interdisciplinary major in geology and physics. The requirements of this major include advanced work in both physics and geology, but there is some flexibility in the choice of courses to meet the specific needs of the student.

### Major Requirements

1. Five units of geology; must include GEOL 103 or GEOL 110, 203, 350.
2. Four and one half units of physics; must include 151, 152, 307, 317 and 333.
3. Two additional units chosen from appropriate courses in geology or physics at the 200 level or above.
4. A senior research project in some area of geophysics, with advisors from both geology and physics departments.

### Recommended Courses

MATH 205 Multivariable Calculus; MATH 230. Differential Equations.

Advising is provided through both the geology and physics departments. Since this major is expected to serve students with a wide range of interests, anyone considering it is encouraged to consult with these departments about appropriate scheduling of courses, including interdepartmental offerings.

Students contemplating this major should also be aware of possibilities for advanced placement in chemistry, mathematics and physics courses that could provide added flexibility to their programs. Students should register for PHYS 151, 152 and not PHYS 103, 104.

## Global Studies

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Major and minor offered.

Visit the global studies department webpage at <https://www.stlawu.edu/offices/global-studies>.

### Major Requirements

Take eight Global Studies core courses, do an off-campus study program, and explore your intellectual interests! We require 14-15 units towards the major, including off-campus courses, and courses outside the department, depending upon students' concentrations. Students are encouraged to take 101 and 102 in their first year and must complete all the core courses in the department.

### Core Courses (8 units)

- 101. Introduction to Global Studies: Political Economy.
- 102. Introduction to Global Studies: Race, Culture and Identity.
- 290. Research Methods in Global Studies.
- 301. Theories of Global Political Economy.
- 302. Theories of Global Cultural Studies.

Two (2) Global Studies electives (GS designation), one at the 200 level and one at the 300 level and should normally fit in with the student's choice of concentration (*below*). For example, GS264 and GS365 for Global Public Health.

489 or 490. SYE: Senior Project. **or**

498,499. SYE: Honors Project.

### Choice of Concentrations (7 units, including study of a second language).

Students have three tracks they can choose from to mold their concentration, which can be satisfied with department courses, other on-campus courses, general education requirements courses, and off-campus courses.

These are:

- A. *Comparative area studies*: complete three (3) courses in each of two geographic or cultural areas; and one semester of a second language; **or**
- B. *One-area intense study*: complete four (4) courses in one geographic or cultural area and three semesters of a second language related to their area concentration; **or**
- C. *Area and thematic study*: complete three (3) courses in one geographic or cultural area, and three (3) courses in one thematic area; and one semester of a second language.

Programs available for students' geographic or cultural area concentrations include:

- Arabic Studies
- African Studies
- African American Studies
- Asian Studies
- Canadian Studies
- Caribbean, Latin American, and Latino Studies
- European Studies
- Native American Studies
- Other areas (e.g., Middle Eastern or Islamic Studies) with approval of the department chair.

Programs available for students' thematic area concentrations include:

- Global Public Health
- Digital Media and Film
- Diasporas, Migration and Borders
- Global Development
- Environmental Studies
- Race, Gender and Sexuality
- Governance and Security

- Education and Critical Pedagogies
- Peace and Conflict
- Business and Finance
- Other areas with the approval of the department chair.

All global studies majors are expected to spend at least a semester in off-campus study, gaining field experience and praxis. They are also required to study a second language. The courses taken off campus typically count toward the relevant area of concentration and often allow students to do research toward the senior project (SYE). Students are encouraged to meet early with a Global Studies faculty member to discuss off-campus study possibilities.

## Honors

To be considered for honors in global studies, students must achieve a minimum GPA of 3.5 in the major and 3.2 overall and submit for evaluation a one-year research project of substantial length and quality. Further details may be obtained in the department office.

## Minor Requirements

The global studies minor consists of six courses: GS 101, 102, either 301 *or* 302, two (2) electives in global studies, normally one at the 200 level and one at the 300 level, and a semester of second language study.

## Courses

101. Introduction to Global Studies I: Political Economy.

An introduction to the reasons for the emergence of a global political economy. Using case studies, students examine the basic concepts and vocabulary in the political-economic analysis of globalization, such as free trade, capital accumulation, international division of labor, neo-liberalism, privatization, structural adjustment and sustainable development. The course explores the consequences of changing patterns of transnational economic and governance structures for nation-states, ecosystems and people's lives, and examines the repercussions of economic globalization. Discussion of the opposition movements that have formed to contest globalization, such as those emerging from labor movements, environmentalism and feminism. May be counted toward the majors in Conservation Biology and Digital Media and Film and the minors in Peace Studies and Public Health. Fulfills SS requirement.

102. Introduction to Global Studies II: Race, Culture, Identity.

Examination of their own identities and social locations leads students to an understanding of how those identities exist in a global matrix of cultural, economic and political relationships. Students are introduced to various theoretical and political positions on identity, with a focus on gender, race, ethnicity, class, spirituality and sexuality. While much of the material is drawn from the contemporary era, the historical context of European conquest and expansion and the Middle Passage frame a critical examination of the evolving ideas of "America" and the "West." May be counted toward the major in

Digital Media & Film and the minors in African American Studies, Native American Studies, Peace Studies, and Public Health. Fulfills DIV13 requirement.

218. Cities and Globalization.

Cities reflect and embody the myriad and complex processes of globalization, challenging the nation-state's role in circumscribing people's life and activities. A few "global cities" are the control points for the organization of new forms of economic, political and social geographies associated with global processes. Other large "world" cities in both the developed and the developing world are incorporated into the global urban system through the economic, cultural and political power they exercise at different scales — local, national, transnational, regional, and global. The objective of this course is to critically understand the relationship between cities and globalization, and to appreciate cities as sites of struggle associated with globalization. When possible, the course includes a field trip to Toronto, Canada.

222. Asian Political Economy in the Global Age.

This course covers the geographical and historical rise of East Asian economies in the context of "quasi-states" in the world economy, the spectacular economic growth of China, and the social and economic crisis gripping South Asia in the context of contemporary debates about neo-liberalism, gender, identity, community and communalism. What are the prospects for East and South Asia in the new global millennium? Topics include regional perspectives on global capital accumulation, global inequalities, human rights discourse, fundamentalism and social movements. May be counted toward the minor in Asian Studies. Fulfills SS requirement.

230. Secrets & Lies: Nationalism, Violence & Memory.

This course explores the complex and difficult processes through which nations confront - or fail to confront - their histories of colonization, genocide and other types of mass violence. Through a comparative look at case studies such as South Africa, Israel/Palestine and the United States, the course examines a variety of collective responses to mass violence, including denial, truth commissions, war crimes trials and reparations. Also offered through Peace Studies. Fulfills HU requirement.

233. GIS. (with lab)

Geographic Information Systems (GIS) is the use of computers to manage, display and analyze spatial or geographical information. This course introduces students to the basic concepts, functions, and applications of GIS. We discuss maps, data sources and management, and geographic techniques, including global positioning systems, aerial photography and satellite imagery. Through a series of lab exercises students explore the analytical functions of GIS, such as proximity, overlay and three-dimensional modeling. To further understand GIS practices and applications, each student develops a GIS project with data appropriate to his or her area of interest. *Also offered as GEOL 233.*

235. Power, Profit, and Cultural Politics of Sport

From Nelson Mandela using rugby to unite South Africa and rehabilitate its international image to Billie Jean King championing equality in women's tennis and LGBTQ rights, to Muhammad Ali's political stance against the Vietnam War, to Colin Kaepernick protesting police brutality and oppression, sports and athletes have served as vehicles of social critique and catalysts for social transformation. This course takes an interdisciplinary approach to contextualize and analyze how sports constitute contested sites of power. It examines critically how sports have been globalized, commodified, and controlled by a handful of transnational corporations. It also explores how sports manifest expressions of local cultural values, embodiment, representations of normalcy, and difference. Topics covered in this course include, but are not limited to, colonialism and sports; sports labor and the racialized body; corporatization of college sports; popular media and representation; masculinity and femininity; nationalism and identity; sports and militarization; and the ethics of sports. Finally, this course engages students as participants, fans, consumers, and spectators to interrogate critically and reflexively the relationship between sports and social justice. Fulfills DIV13 requirement.

238. Global Christianities.

This course explores Christianity outside the United States and Europe. Catholic and Protestant Christianities in addition to newer forms of Christianity are included, and case studies are drawn from Africa, Asia and Latin America. Pentecostal Christianity (also called Charismatic Christianity) is a particular focus. The course considers the conflict and interplay of older forms of Christianity, often part of the inheritance of colonialism, with more recent arrivals; probes the relationship between religion and the processes of globalization; and questions whether any of these forms of Christianity can be described as globalized, and, if so, whether global Christianity resists or supports globalization. Fulfills DIV 13 requirement. *Also offered as REL 238.*

255. Popular Culture.

What is popular culture? What role does it play in our lives and how we understand the world? How does globalization shape popular media, cultural productions and expressions? This course introduces students to how various contemporary popular cultural forms (e.g., hip hop music, sports, comics, fashion, reality TV, social media, cybercultures, and advertising) are embedded in complex historical, political, sociocultural contexts, and in relations of power around identity categories such as race, gender, sexuality and class. Course work will ask to students to think critically and reflexively about the ideologies and representations of how popular cultural forms are (re)produced and consumed locally and globally. Fulfills DIV13 requirement.

259. Global-Local Environmentalisms.

This course explores the ways environmental social movements and environmental conflicts are experienced across multiple scales: from global to local. We will examine the role that broad-based and influential environmental or development efforts play in defining contested landscapes and concepts of "nature" more broadly. In addition, we will consider how they engage with variously positioned local communities that often have deeply rooted and socially and culturally rich connections to those same landscapes. We will focus on particular case studies addressing wilderness preservation, fortress

conservation, and environmental justice efforts in the global North and South. May be counted toward the minor in Conservation Biology. Fulfills the EL requirement.

#### 260. Transnational Migration.

Students acquire a global perspective on the nature of migration movements, why they take place and how they affect migrating peoples, as well as the societies receiving them. Themes include transnationalism and new approaches to national identity and citizenship; migration as a social network-driven process; gendered migration; migration and the formation of ethnic minorities. The course analyzes how transnational movements of people, goods and services affect and transform the relationships between cities and nations and explores the political meaning of contemporary nationalism and the possibilities of new forms of citizenship. May be counted toward the minor in Native American Studies. Fulfills the SS requirement.

#### 262. Globalization and the African Diaspora

In an increasingly interconnected and interdependent world, Africa appears marginalized or absent from contemporary imaginations and discourses of globalization. Yet, Africa, a heterogeneous continent differentiated along geographical, historical, social, cultural, religious, economic, and political lines among others, has been and continues to be integral to the global economy. Through an interdisciplinary diasporic approach, this course examines how particular global processes intersect with and manifest differently in and across specific places and social realities in the Africa diaspora. It explores the complex historical place of Africa in the global economy through the forced and voluntary dispersion of Africans and the legacies of slavery, colonialism, racism, underdevelopment, and globalization. By engaging with the works of diaspora African scholars, academics, activists, and various visual and literary artists, the course aims to widen students' perspectives and understanding of how global and transnational exchanges articulates myriad intersecting social practices and identities in the African diaspora. Themes covered in the course include slavery, colonialism and imperialism, diasporas and migration, global and popular culture, gender and sexuality, social media and youth cultures, politics, and social justice. Fulfills the DIV 13 requirement. Also offered as AFS 262.

#### 264. Global Public Health: Critical Approaches

Global public health is a transdisciplinary field that addresses how to achieve health and well-being in an interconnected world. With a critical approach, this course explores how health and well-being are conceptualized and pursued in the context of global diversity and inequality as well as state and hegemonic/imperial power. Students will consider how class, race, gender, sexuality and (dis)ability shape health opportunities and challenges for individuals, groups, and populations. The course goes beyond established social determinants to understand the relevant local and global level areas such as food security, housing quality and shortage, education and health care access and quality, ability to work and level of income, the ecosystem limits, and restrictions to social justice and disturbance of peace. Prerequisite: GS-101 or GS-102. May be counted toward a major or minor in Public Health. Fulfills the DIV13 and HU requirements.

268. Global Health and Justice.

This course considers the ways colonial power dynamics continue to structure our present and are fundamentally sickening. Solutions for contemporary health injustices must take into account ongoing colonial effects - including the construction and continued salience of race, the imposition of gender/sex binaries, ecological devastation, global inequities in wealth and power, and the dominance of colonial knowledge systems. Through case studies, in-class activities and independent research projects, students will begin to conceptualize more deeply decolonizing solutions for our contemporary health crises. May be counted toward a major or minor in Public Health. Fulfills the DIV13 and SS requirements.

290. Global Studies Research Methods.

An introduction to research approaches that take into account the economic and political context of the production of culture, textual analysis and people's perceptions. Objectives are to examine the philosophy and epistemology of qualitative methods, to understand various approaches to qualitative research, to develop the skills to design a qualitative research project, to gather and analyze qualitative data, and to present the preliminary findings. For their final project, students produce a research design for their SYE and apply learned research strategies to their own research questions. The course emphasizes the importance of critical awareness of the practical, social, and ethical issues that arise in doing cultural and social analysis and research in everyday settings. Prerequisite: GS-101 or GS-102.

293. A Literary Harvest.

While environmental writers and activists such as Wendell Berry, Bill McKibben and the Indian physicist Vandana Shiva have alerted us to the ecological, ethical, and health problems associated with factory farming, the North Country has long been a haven for sustainable, small-scale organic agriculture. This is a creative writing course in literary nonfiction that focuses on food, food security, and farming. It has both a CBL component and a cross-cultural, comparative focus (India). The community-based learning takes place in the course's required lab component. Students will draw from nonfiction readings, their CBL work, and past experience, including travel, to examine the themes from both a local and global perspective. *Also offered as ENG 293.*

301. Theories of Global Political Economy.

This course explores the complex relationship between states and economies at the global level. Its primary purpose is to provide a critical understanding of the major theoretical and analytical issues that constitute the crucial challenge to the study of global political economy today. It moves beyond the traditional agenda of international political economy, namely trade and investment, to address a wide range of alternative theories, concepts and themes, including the origins, functions and impacts of transnational corporations, international financial institutions, regional and global trade organizations and non-governmental organizations involved in social movements. Prerequisite: GS-101. May be counted toward the major in Conservation Biology and the minor in Peace Studies. Fulfills the HU requirement.

### 302. Theories of Global Cultural Studies.

An introduction to the growing field of cultural studies through examination of its major theoretical paradigms, particularly as these bear on the question of unequal global power relations. These may include Marxism, critical theory, post-structuralism, feminist theory and emerging work in postmodernism and post-colonial studies. Students explore strategies for “reading” cultural practices and texts not simply as reflections of reality, but as political interventions, expressions of desire, attempts to persuade and producers of power. Through a combination of theoretical criticism and analysis of specific materials, students prepare to undertake independent research with an informed understanding of how cultural studies challenge and enrich traditional social science and humanities approaches. Prerequisite: GS 101 or 102. May be counted toward the major in Digital Media and Film and the minors in Film and Representation Studies, Native American Studies, and Peace Studies. Fulfills the HU requirement.

### 318. Gender in the Middle East.

Gender constructs cultural, political, and socio-economic relations across class and racial lines in the West and throughout the rest of the world, although the concepts and structures that define gender roles can differ significantly. The aim of this course is to offer an overview of the key issues in the study of gender in the Middle East. It will provide a specific area focus for students of gender and global studies while providing a gendered understanding of prevailing discourses, ideologies, social practices, and trends for those students interested in Middle East societies, laws and politics. The course is interdisciplinary in scope; therefore the readings and theoretical underpinnings range from history and sociology to anthropology, political science, and media studies, including contracting movies and documentaries made in the Middle East and those made in the West about the Middle East. Prerequisite: GS-102 or GNDR-103. *Also offered as GNDR-318.*

### 324. Global Public Goods: Exploring Solutions for the 21st Century.

This course addresses attempts to initiate, coordinate, and execute solutions to problems that many understand as being not solely local in origin and implication, but rather connected with other sites, across the world (e.g., cultural destruction, disease and health care, financial crises, ecological destruction, aging and social security challenges, state and non-state actor violence, migration). Framing issues in the language of global interests, the metaphor of “public goods” invites an approach that seeks commonalities with an eye toward action that allow forms of cooperation to be imagined and achieved. Students produce a major paper on one theme written over the semester as part of their course obligations. May be counted toward the major in Conservation Biology and the minor in Public Health. Fulfills the EL requirement.

### 333. Ethics of Global Citizenship.

This research seminar is designed to address, from a philosophical perspective, some of the difficult ethical questions arising from the global organization of the world. Readings include classical, non-western and alternative theories of justice and peace. The course interrogates the discourses surrounding patriotism and cosmopolitanism, peace and violence, terrorism and war, justice and retribution, and the debates surrounding relativism versus universalism, especially with regard to the claims for human rights. Students undertake research projects dealing with the ways these issues are

being negotiated in countries where they studied abroad, and develop ethical positions on their own responsibilities toward global citizenship. May be counted toward the minors in Peace Studies and Public Health. *Also offered as PHIL 333.*

340. Blogging the Globe: News Analysis and Investigative Journalism.

This course fosters the tools necessary to be critical readers and viewers of the news in a complex, globalized media environment while also giving students the opportunity to become investigative journalists themselves. In addition to examining patterns in how global events are covered in mainstream and independent/alternative media outlets in the U.S. and elsewhere, the course explores deeper structural issues concerning discourse, ideology and the representation of “other” cultures; the relationship between media, corporate and state power; and the role of institutions in defining the bounds of “legitimate” knowledge. Students in the course contribute to Weave News, an independent media organization, by researching and blogging about underreported stories. Prerequisite: Global Studies 101 or 102. This course may be counted toward the major in Digital Media & Film. *Also offered as DMF 340 and PCA 312.*

350. Global Palestine.

This course explores the global significance of the modern colonization of Palestine and the resulting Palestinian struggle for national liberation. Moving beyond conventional interpretations of the conflict between Israel/Zionism and the Palestinians, the course emphasizes Palestine’s location within a set of broader global structures and processes including settler colonialism, militarization, social acceleration, solidarity movements, and the relationship between state and non-state forms of terrorism. Students develop familiarity with important theoretical concepts within global studies while also furthering their understanding of why Palestine, despite its small size, continues to matter so much to so many. This course may be counted toward the minors in Arabic Studies and Peace Studies.

365. Rethinking Population, Health, and Environment.

This course addresses complex interrelations among and between population, health, and the environment in an increasingly interdependent world. The aim is to provide theoretically and empirically grounded understandings of the historical and contemporary evolution of various population dynamics, including demographic change, public health, diseases, human migration, urbanization, disasters, and population-environment patterns. The course employs an interdisciplinary approach to identify critically how economic, political, cultural, social, and environmental factors operating across multiple scales (local to global) shape the intersection of population, health, and the environment. Through specific case studies, the course also explores current challenges in global health, population policies around reproductive rights, health systems and reforms, environment change, and emerging issues around equity, social, and environmental justice. Prerequisite: GS-101 or GS-102. May be counted toward the major in Conservation Biology and the major or minor in Public Health. Fulfills the EL requirement.

367. Feminist Postcolonial Theory.

Postcolonial theory addresses issues of identity, culture, literature, and history arising from the social context of colonization, resistance to colonization, liberation from colonization and the formation of new nations. It crosses the boundaries of the social sciences and humanities in its approach to theory

and analysis of the discourses used to constitute colonial and postcolonial subjects. We begin with some classic texts of postcolonial theory before moving to a focus on specifically feminist debates and texts within post-colonial studies. Literature and film are used in dialog with theoretical texts to examine questions about gender and women's issues in various societies. *Also offered as ENG 367, GNDR 367 and PHIL 367.*

390. Independent Study.

409. Internship: Weave News.

This project-based internship course is designed for students who are interested in the intersection of independent media and social justice activism. Students in the course serve as one-semester interns for Weave News (<http://www.weavenews.org>) an independent media organization focused on stories that are not receiving sufficient attention from the corporate and establishment news media. Through working on collaborative projects, students develop practical skills in a number of areas such as media production, digital content creation, fundraising, community outreach, public relations, event planning, grant writing, and organizational development.

412. Cross Cultural Perspectives of Healing.

This class uses healing traditions as the lens with which to examine culture. During the semester students will have the opportunity to meet healers from around the world. In a typical semester presenters include a Traditional Chinese Medical practitioner, an Ayurvedic physician (from India), a shaman from Peru, an exorcist, a native American healer, an allopathic physician, new age healers, a Christian Scientist and others. May be counted toward a minor in Public Health. Fulfills the DIV13 requirement. *Also offered as REL 412 and BIOL 412.*

489, 490. SYE: Senior Project.

498, 499. SYE: Honors Project.

## Government

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Major and minor offered.

Visit the government department webpage at <https://www.stlawu.edu/offices/government>.

### Major Requirements

Students entering St. Lawrence with an interest in government and politics are strongly advised to enroll in two of the 100-level core courses (103, 105, 108) during their first year, one of which should be taken as a writing-intensive version (103W, 105W, 108W). Students should also seek early advising from a government department faculty member.

The major in government requires the completion of nine units distributed as follows:

1. **Core Courses (4):** Government majors must complete the introductory course for each of the four disciplinary subfields: American Politics (103), Comparative Politics (105), International Politics (108) and Political Theory (206). One of the three 100-level courses must be designated writing intensive (WI) and should be completed before the end of the sophomore year. These four introductory courses must be taken in residence on the St. Lawrence campus.
2. **Research Seminar (1):** During the sophomore or junior year, ideally after completion of the writing-intensive course, majors must take one of the government Research Seminars (290, 291, 292, 293). Students may take only one research seminar.
3. **Elective Courses (4):** The remaining four units may be earned through a selection of elective courses, one of which must be 300/400-level course taken on campus. Students may count up to one unit of internship coursework and one unit of independent study toward the elective requirements. Students who complete the two-course SYE: Honors Thesis may not also use an internship or an independent study course to meet the major requirements, although such courses do count toward the units required for graduation. No more than two of the elective courses may be taken off campus.

A major may elect no more than four out of nine units for the major in any one subfield of the discipline. The academic work of transfer students in political science is evaluated upon entry into the department for determination of credit. In no case may a transfer student majoring in government take fewer than five government courses at St. Lawrence.

### Environmental Studies–Government Major

A combined environmental studies–government major is available. Please consult the Environmental Studies section of this *Catalog* for the complete list of courses.

### Minor Requirements

The minor in government requires the completion of five units distributed as follows:

1. **Core Courses (2).** Government minors must complete two of the following introductory courses: American Politics (103), Comparative Politics (105),

International Politics (108) and Political Theory (206). These courses must be taken in residence on the St. Lawrence campus.

2. **Research Seminar (1).** During the sophomore or junior year, minors must take the government Research Seminar (290).
3. **Elective Courses (2).** The remaining two units may be earned through a selection of upper-level (i.e. non-introductory) elective courses. The department will credit one upper-level government course taken in a St. Lawrence-sponsored off-campus program. Internships in government do not count as courses toward the minor.

## Honors

Departmental honors are awarded at graduation to majors who have achieved a minimum grade point average of 3.5 in government courses and who have also received an “honors” designation on the senior thesis. Additional information regarding the senior honors thesis can be found on the departmental website. (See Honors in the Curriculum chapter of this *Catalog*.)

## Courses

### Introductory

103. Introduction to American Politics.

Who gets what and how? This course answers that question by introducing the major institutions and actors of the American political system, including the Constitution, parties, interest groups and the legislative, executive and judicial branches of government. The course also examines the cultural, ideological and economic contexts in which American politics occurs, as well as the mechanisms and possibilities of political change.

105. Introduction to Comparative Politics.

Comparative politics analyzes how demands emerge, power is exercised, and benefits are distributed in different countries. It uses both historical and contemporary evidence to examine how societies respond to these challenges in order to appreciate and learn from the differences among them. Developing societies, communist and formerly communist regimes, as well as industrialized democracies, are analyzed and compared as a basis for evaluation and judgment.

108. Introduction to International Politics.

An analysis of international relations as a political process with particular emphasis on patterns of conflict and cooperation. Major areas of study include theories concerning the nature of the international system, nationalism, balance of power, collective security, alliance systems, international law and organization, political economy, war, deterrence, arms control and disarmament, the emerging international order, human rights and the environment. *Also offered through Peace Studies.*

### 206. Introduction to Political Theory.

A study of the answers that philosophers from Plato to Marx have given to the question, "How should political life be organized?" This question leads us to consider the related problems of justice, power, equality, freedom and human nature. The course includes discussion of the strengths and weaknesses of liberal democracy.

### Research Seminars

290, 291, 292, 293. Research Seminars.

Research seminars cover topics related to American Politics (290), Comparative Politics (291), Political Theory (292), and International Politics (293). The specific topics of these seminars vary depending on the interests of faculty and students. Recent topics have included China's Rise, Israeli-Palestinian Conflict, Presidential Elections, Comparative Environmental Politics, Corruption & Good Governance, and Foreign Aid. The seminars are designed to acquaint students with research problems, strategies and techniques relevant to the field. This course is required for all government majors and minors and should be completed in the sophomore or junior year. Students may take only one research seminar.

### American Politics

#### 302. The American Legal System.

This course explores the workings of the courts at all levels of the U.S. legal system. The primary goal is to increase and broaden our understanding of what happens in courts, why it happens, and how courts fit into the larger political system. Much of our attention will focus on actors in the legal system (lawyers, juries, interest groups and especially judges) as we consider how their behavior is shaped by and in turn shapes our legal and political institutions and environments. Students will be asked to weigh in on contemporary debates surrounding the legal process and to grapple with some of the difficult normative questions associated with American courts. Recommended as preparation for GOVT 307. Prerequisite: GOVT 103.

#### 303. Political Parties, Interest Groups and Voting Behavior.

Two mechanisms try to organize ordinary citizens so that government may be responsive to people's needs: parties and interest groups. One of their aims has been to organize citizens into rational, effective voting blocs. This course looks at how parties and interest groups work and at whether or not they are fulfilling their purpose. Prerequisite: GOVT 103; GOVT 302 is recommended.

#### 307. Constitutional Law.

This course examines the constitutional jurisprudence of the United States Supreme Court and how its decisions have shaped the contours of the relationship among political institutions and between the individual and the state. Among the areas of law explored are presidential powers; the powers of Congress; freedom of speech, press and religion; equal protection; federalism; and the rights to privacy, to bear arms and to vote. While working toward a fuller understanding of Supreme Court jurisprudence, the course also aims to develop students' capacity for logical and legal reasoning. Prerequisites: GOVT 302.

309. Congress.

An institutional and behavioral examination of the legislative process in Congress, with attention to current policy issues. Prerequisite: GOVT 103.

310. The U.S. Presidency.

An examination of the functions of the presidency, with stress on the development of the executive branch in response to political needs and opportunities. Prerequisite: GOVT 103.

316. Business & Ethics.

This seminar looks at the relation between public policy and ethical dilemmas in the arenas of corporate life and professional service. The course asks students to examine the sorts of moral dilemmas they can expect to encounter in their chosen fields of work and takes a case-study approach to such topics as employee rights, information disclosure, Affirmative Action, sexual harassment and whistleblowing, and the roles that public policy should — or should not — play in relation to these issues.

### **Comparative Politics**

228. Latin American Politics.

This course introduces students to the politics of Latin America. Tracing the roots of current political conflict to the colonial era, the primary focus of the course is on underdevelopment and political change in Latin America today. The course examines the roles of key political actors, including the military, indigenous peoples and the church. It explores patterns of development, introducing theories that seek to explain persistent poverty and inequality as well as the periodic swings between authoritarianism and democracy in the region. The course material emphasizes current pressures for political inclusion, tracking social movements and human rights. Themes are illustrated with case studies. *Also offered as CLAS 228.*

230. African Politics.

This course explores the evolution of power and authority across Sub-Saharan Africa. The first part of the course traces the changing dynamics of African states through pre-colonial history, colonialism and conquest, the rise of nationalism and independence, and democratization and authoritarian backsliding in order to provide a foundation for understanding both region-wide and country-specific trends in politics and development. Building on this foundation, the second part of the course analyzes contemporary prospects and challenges facing today's African states as they attempt to manage the interests of ethnically diverse societies, reform political institutions, spur development and decrease inequality, adapt to climate change, grapple with human rights, counteract political violence, and compete in the global economy. Especially recommended for students who plan to participate in the Kenya Semester Program or the Global Francophone Cultures Program and students returning from these programs. *Also offered as AFS 230.*

### 322. Chinese Politics.

An introductory survey of China from four perspectives: China as China, China as a Communist party state, China as a developing country, and China as a rising power. Through these lenses, the course examines the historical factors that have shaped contemporary Chinese institutions and the Chinese Communist Party. It also examines China's influence and security concerns within the international community. Especially recommended for students who plan to participate in an off-campus program in China and for students returning from the program. *Also offered as ASIA 322 and through Peace Studies.*

### 324. Asia: Beyond the Great Wall.

Asia is currently one of the most dynamic and consequential regions in the world. This course seeks to answer the following questions to make sense of this vast and diverse area: How is the "West" (and especially the U.S.) to understand Asia's rise in the global context? What political and economic factors explain developmental success and failure in the region? Will Asia decide the future of democracy in the global context? Does thinking about Asia as a region makes sense like a European Union? This course aims to provide students with a deeper historical, political, and economic understanding of Asia within the global context.

### 325. Canadian Politics.

An introductory survey of the formal institutions and the processes of Canadian politics. Emphasis is on the federal government and on federal-provincial relations. Topics covered include the parliamentary process, parties and voting.

### 328. Political Institutions in the Developing World.

Can the choice of certain political institutions promote better representation, political stability, more government accountability, less corruption, or improved economic performance in developing countries across sub-Saharan Africa, Latin America, the Middle East, and Asia? This course tackles these questions by introducing students to the main approaches in comparative institutional analysis and exploring the design and consequences of a wide range of political institutions (or "rules of the political game") such as state structures, electoral systems, executive powers, the legislature, the judiciary, and sub-national structures. Discussions center on debates about the trade-offs between representation and efficiency, whether political behavior can be shaped by incentives, the impact of historical legacies, and the unique challenge of implementing formal institutional rules in societies where informal practices shape much of the political life. Prerequisite: Any 100-level Government course or permission of the instructor.

### 330. European Politics.

This course focuses on West European governments, political parties and social movements. It seeks to provide students with essential information about West European politics, as well as contemporary theories about advanced capitalist democracies. Comparisons between European and American politics are frequent so that students may better see the distinctiveness of each. Issues examined include the European welfare state, the significance of the European Union, the changing contours of political conflict and the emergence of multiculturalism in Europe. Especially recommended for students who

plan to participate in an off-campus program in Europe and for students returning from those programs. Prerequisite: GOVT 290–3 or permission of the instructor. *Also offered through European Studies.*

### 331. Middle East Politics.

This course examines the political development of the Arab and non-Arab states in the Middle East since the fall of the Ottoman Empire. The course adopts both a thematic approach, comparing history, culture, religion and the role of foreign intervention, as well as a country-based approach, examining the politics and policies of specific Arab and Non-Arab countries. The objective of the course is to provide students with an understanding of the challenges facing the region and those studying it. Students participating in this course will be involved in an elaborate simulation game in which they represent regional state and non-state actors. Prerequisite: GOVT 105. Introduction to Comparative Politics. *Also offered through Peace Studies.*

### 337. Torture, Truth and Memory

Authoritarian regimes have often committed massive human rights abuses that included murder, torture, disappearances, involuntary exile and forced adoptions. As a condition for transitioning to democratic governance outgoing military leaders insisted on amnesty for those crimes, but societies have sought to come to terms with their human rights history through other means such as truth commissions, forensic anthropology, investigative journalism, international prosecution, collective memory projects and popular culture. Drawing on memoirs, torturers' confessions, declassified documents, films, literature and analytical texts this course explores the ongoing struggle over who will interpret the political past, and what roles justice and reconciliation may play in securing democracy for the future. Course readings will center on Latin American cases, and students can apply those lessons in other world regions through their research papers. *Also offered as CLAS 337 and through Peace Studies.*

## Political Theory

### 315. Feminist Political Theory

This course will introduce you to some of the ways by which feminists draw from and transform political theory, as well as how political theory may inform or help us to understand feminist claims and activism. We will read post-second wave feminist analysis. Through our readings, we will explore concepts, such as citizenship, freedom, agency, and rights, that are central to political theory, and explore how these new ways of thinking can help us to envision society in new ways. We will also explore the implications of theory for political activism. Prerequisite GOVT 206 or GNDR 290.

### 343. Ecology and Political Thought.

Ecology reminds us that our activities are embedded within natural systems. What is the significance of this fact for politics? This course examines how various actors, such as citizens, consumers, social movements, scientific experts and governmental agencies, conceptualize the relationship between humanity and the natural world. We evaluate the merits and shortcomings of a variety of approaches to environmental politics, including survivalism, sustainable development, deep ecology, ecofeminism and the environmental justice movement. Does not satisfy the department's major requirement in political theory. Prerequisite: ENVS 101, GOVT 206, or permission of instructor. *Also offered as ENVS 343.*

345. Political Theories of Violence and Nonviolence.

Carl von Clausewitz famously remarked that “war is a continuation of politics by other means,” which suggests that politics is intimately connected with violence even as it seeks to avoid it. In this discussion-based seminar we will examine how key figures throughout the history of political thought have conceptualized the relationship between politics, violence, and non-violence. Topics covered in the course include just war theory, the role of violence in the state, non-violent civil disobedience, and revolutionary violence associated with working class and anti-colonial struggles. *Also offered as PHIL 343 and through European Studies and Peace Studies.*

350. American Political Thought: Twentieth Century.

An examination of the main currents of political thinking in the United States from the Progressive Era through the end of the 1960s. Thinkers considered include the Social Darwinists, Thorstein Veblen, W.E.B. DuBois, Jane Addams and John Dewey. We also look at both the resurgence of conservative thought in the 1950s and some of the sociological critiques of the post-war era out of which the New Left, civil rights, Black Power, feminist and ecological movements grew.

351. African American Political and Social Thought

This course will offer a broad-based survey of African American social and political thought. Its focus will be on the theme of duality: what it means for a culture and a people to be both integral to and excluded from the larger society of which they are a part. It will examine the variety of ways African American thinkers have confronted this duality and how they have asserted the dignity and autonomy of their people in the context of a social order historically structured to deny them their full humanity. The course will include such African American thinkers and writers as David Walker, Frederick Douglass, Ida B. Wells, Booker T. Washington, W.E.B. DuBois, Richard Wright, James Baldwin, Audre Lorde and Toni Morrison.

368. Democracy and Its Critics.

Most countries in the world today are democratic, but there is no single model of democracy and no consensus on what the term means. This applied political theory course reviews models of democracy across the centuries, including classical democracy, competitive elitism, participatory democracy and deliberative democracy. The course focuses on the democratic principles behind the models, drawing on the work of major Western thinkers from ancient Greece, the Italian Renaissance city-states, 18th- and 19th-century France and England, as well as the United States. It centers discussion around themes such as representation, participation, majority rule and the transformative potential of modern technology for democratic practice. *Also listed as PHIL 368.*

## **International Politics**

281. U.S Foreign Policy toward Latin America.

This course examines U.S. foreign policy toward Latin America from the issuance of the Monroe Doctrine to the present. We will track the development of the inter-American system in a context of U.S. hegemony and show how asymmetric power relations have influenced resolution of key problems in

regional relations. The course will review changing U.S. policies toward the region, such as dollar diplomacy, the Good Neighbor policy, and the Alliance for Progress, as well as formative events such as U.S. military occupation of countries in the Caribbean Basin as well as Cold War covert operations. Students will consider how the United States and Latin America see shared policy problems differently, including the debt crisis, immigration, illicit drug flows, and environmental problems, and how states nonetheless sometimes cooperate in the resolution of them. *Also offered as CLAS 281.*

### 360. International Relations Theory.

An advanced seminar on the theories of international relations. The principal contending theories of international relations are investigated and critiqued. Although the nation-state system remains the primary focus of scholars of international relations, other major non-state actors of the international system are examined. Prerequisite: GOVT 108 or permission of instructor. *Also offered through Peace Studies.*

### 361. American Foreign Policy.

A study of the formulation, conduct and administration of United States foreign policy, particularly since 1945. The course examines the directions of U.S. foreign policy since 1989 and the goals and values that have guided foreign policy in the new environment. What directions should American policy take in contemporary foreign relations and what goals and values should guide that policy direction? Prerequisites: GOVT 108.

### 363. International Organization and Global Governance.

This course introduces students to the structure, actors, and processes of global governance. It begins with a broad overview of the characterization of the international system and incentives for states and nonstate actors to cooperate under anarchy. Students will then develop a knowledge of various formal international organizations (IOs) such as the United Nations, the European Union, NATO, the International Monetary Fund. Ultimately, they will apply their knowledge of IOs to think analytically and critically about global problems (such as interstate/intrastate conflicts, terrorism, financial crises, climate change, global poverty, etc.) and analyze the extent to which IOs can make a difference in the global arena.

### 364. Terrorism and Human Rights.

This course examines the challenges facing democracies combating terrorism in the post-9/11 setting. States tend to become less democratic when combating terrorism; however, the goal of this course is to examine alternative strategies to the “war” on terror, strategies that lean even more towards human rights observance rather than democratic deficit. This course is interdisciplinary and interactive, largely based on class discussion rather than lectures. We tackle questions of law, policy, and the psychology of fear. Prerequisite: GOVT 108. *Also offered through Peace Studies.*

### 371. Politics of the Game of Thrones

When it aired, the HBO series Game of Thrones became a global phenomenon—the most watched and pirated show on television ever. It has inspired much academic research and exploration, especially in the field of international relations. The show, based on the Novels by George R.R. Martin, was viewed in over 170 countries. World leaders incorporated memes from the show as well as some of its discourse ("winter is coming" for climate change for example) in their political communication. This course combines the discipline of international relations (IR) with pop culture to learn how the two interact using Game of Thrones show. You will be asked to learn about concepts in the academic field of international relations, know how IR scholars have analyzed or studied pop culture, especially GoT, and apply your knowledge to the show's content in season 1 through 3. No prior knowledge of Game Of Thrones is necessary.

### 372. Canada in World Affairs.

A broad survey of the Canadian experience in international politics. Ultimately it is an inquiry into the relationship among the international system, the elusive Canadian national interest and the limited set of foreign policy tools at the disposal of the Canadian government. Prerequisite: GOVT 108 or permission of instructor.

## Special Topics Courses

3000 Series (200-Level Courses)

4000 Series (300-Level Courses)

In addition to the courses listed above, each semester the Government Department offers a number of courses covering special topics in the fields of American politics, comparative politics, international politics and political theory. Courses at the 200 level are given a course number in the 3000 series. Courses at the 300 level are given a designation in the 4000 series. The content of each course or section of these 200-level or 300-level special topics courses varies and will be announced each semester.

## Advance Studies

479,480. SYE: Internships.

Kwame Nkrumah once said, "Thought without practice is empty; practice without thought is blind." This course brings the two together. Students are required to spend at least eight hours per week in an internship at a local community service agency, dealing with such problems as poverty, crime, illiteracy, environmental degradation, domestic violence and so on. Students reflect on the field experience by writing a research paper related to the internship, keeping a journal that reflects on the field experience in a scholarly way and attending a series of workshops designed to help them conceptualize their experiences. Prerequisites: GOVT 103 and 290-3, an overall GPA of 2.8 or better and permission of instructor.

489, 490. SYE: Independent Projects.

Individual study of a topic approved by the department under the direction of a faculty member. Prerequisites: GOVT 103, 290-3, an upper-level course on a topic related to the project and an overall GPA of 2.8.

497, 498. SYE: Senior Thesis.

The senior thesis offers the qualified student an opportunity for more intensive work in the field. Minimum criteria for admission to the program are a 3.5 average in government courses, a satisfactory overall academic record, completion of Government 290-293 with a grade of 3.0 or better and the presentation of an acceptable research proposal. Interested students are required to submit a research proposal to the department near the end of the spring semester of the junior year.

## History and World Languages

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Interdisciplinary major offered.

### Requirements in History for All Majors

Six units in History.

1. 299. Seminar on Historical Research Methods
2. 471-480. SYE: Senior Seminars, independent SYE, or Honors project (in which the student conducts research related to her or his language focus)
3. FOUR one-unit electives.
  - One of these electives must be at the 300 level
  - Any other three electives, no more than one at the 100 level

### Requirements in World Languages for All Majors

#### 7 Required courses:

- A) 6 courses at the 103 level or above
- B) 1 Cultural course taken in English through the World Languages, Cultures, and Media Dept. and related to the field

Students already proficient at the intermediate level will receive credit for 103 and 104 upon completion of a higher-level course in this language.

#### Arabic, Chinese, German and Italian:

#### 7 Required courses:

- A) 4 courses at the 101 level or above
- B) 3 Cultural courses taken in English through the World Languages, Cultures, and Media Dept. and related to the field

Students already proficient at the beginning level will receive credit for 101 and 102 upon completion of a higher-level course in this language.

## Multi-language:

### 7 Required courses:

- A) 3 courses in one language
- B) 3 courses in the concentration language at the 103 level and above
- C) 1 Cultural course taken in English through the World Languages, Cultures, and Media Dept. and related to the field.

## History

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Major and minor offered.

See also combined majors in History and African Studies, History and Asian Studies, History and World Languages, Cultures, and Media.

Visit the history department webpage at <https://www.stlawu.edu/offices/history>.

## Major Requirements

The requirements for the major in history are flexible enough to enable a student to pursue personal interests and goals and at the same time foster an appreciation for the diversity of the human experience. To qualify for a major in history the following minimum requirements must be met:

1. A minimum of 10 history courses must be completed.
2. **At least four courses (at any level)** must be drawn from four of the following broad categories into which the history curriculum is divided: a) Africa, b) Asia, c) Europe, d) Latin America and the Caribbean, e) Middle East, f) North America, g) Transnational.
3. At least one course must be a 299 Historical Research Methods seminar, which must be taken before the senior year.
4. At least one course must be at the 300 level.
5. **At least one course must be a Senior-Year Experience (SYE)**, which may be fulfilled by a 400-level research seminar involving a substantial research project, by the two-semester Honors Project, or by a 400-level independent study (see below).
6. No more than three courses at the 100 level may be credited toward the major.
7. Students must maintain a minimum 2.0 GPA in the major.

## Honors

The honors program in history enables qualified students to engage in intensive original work in the senior year. Admission to the program, at the discretion of the department, requires a GPA of at least 3.5 in the major. Students seeking admission must apply to the chair of the department by no later than May 1 of the junior year. Honors are granted upon the successful completion of an honors thesis written under the direction of a faculty advisor. Completion of the honors thesis earns two credits toward the major (History 498 and 499) and fulfills the SYE requirement. Completion of a written historiography and other requirements by the end of the fall semester (History 498) is required for admission to History 499 in the spring.

## Minor Requirements

A minor in history provides students with an opportunity to select courses that satisfy their interest in the field while learning the tools of the historian's craft. To qualify for a minor in history the following minimum requirements must be met:

1. A minimum of six (6) history courses must be completed.
2. At least one course must be a 299 Historical Research Methods seminar, which must be taken before the senior year.
3. At least one course must be an SYE course.
4. No more than one course at the 100 level may be credited toward the minor.
5. Among the minimum of six courses, not more than one may be an independent study (489, 490) or an internship (481, 482).
6. Students must maintain a minimum 2.0 GPA in the minor.

## Advanced Placement Credit.

A 4 or 5 in one AP course may count for major credit.

## Courses

### 100-Level Courses

Courses at the 100 level, designed specifically for first-year students and sophomores, provide a broad introduction to African, American, Asian, Middle Eastern, Caribbean and Latin American, and European history.

#### 103. Development of the United States, 1607-1877.

This course surveys the creation and development of American society from the European invasions and settlement of North America to the Reconstruction period at the close of the Civil War. While the course follows the chronological development of and changes in American society, it also considers, in some depth, the major ideas and social movements that gave shape to the nation through primary and secondary sources. Topics include Puritans, the American Revolution, slavery, the Great Awakening, federalism, sectionalism, the Civil War, and Reconstruction drawing on the racial and ethnic diversity of the American experience. *Also offered through Native American Studies and Peace Studies.* Fulfills HU requirement.

#### 104. Development of the United States, 1877-Present.

The development of American society from the end of Reconstruction to the present. Emphasis is on the institutions, ideas, and movements that have shaped modern American society. Using both primary and secondary material, the course discusses the chronological development of and changes in American society as well as such topics as industrialization, urbanization, consumption and popular culture, the United States as a world power, the civil rights and women's movements, the Vietnam War, Watergate, and the end of the Cold War. *Also offered through Peace Studies.*

105. Early Asian Civilizations.

An introduction to the history of Asia to 1800 CE. The course focuses on several themes, all turning around how cultures and societies evolve and develop in interaction with each other. We explore cultural encounters through trade, war and diplomacy, personal encounters between individuals of different cultures and the processes of cultural diffusion and pay attention to geography and the critical use of primary documents. *Also offered through Asian Studies and Peace Studies.* Fulfills HU and DIV13 requirements.

106. Modern Asia.

This course examines the Asian region from 1650 to the present. We discuss the creation, dismantling, and continuing remnants of colonialism, World Wars I and II in the Asian context, the Cold War, the Korean and Vietnam Wars, and recent economic development. The course begins with an overview of Asian geography, culture, and history. It is designed to introduce students to major events and issues of modern Asia and also to improve students' skills in critical reading, writing, use of primary and secondary sources, and oral communication. *Also offered through Asian Studies and Peace Studies.*

107. A Historical Approach to Peace Studies

Are humans inherently violent? Is war inevitable? How do people in different societies respond to conflict? Is it possible or even desirable to eliminate all conflict in human interactions? What is meant by "peace"—is it simply the absence of violence? What is necessary for establishing and maintaining a peaceful community or society? How are animals and the environment relevant to peace for humans? Does inner peace relate to outer peace? To answer these questions, we will study historical and recent examples of nonviolent social and political actions and movements, as well as approaches recommended by contemporary scholars and practitioners for transforming conflicts at the interpersonal to international levels and fostering peace. We also will consider how moral doctrines have envisioned alternatives to violence. Additionally, we'll examine and engage in mindfulness, meditative, and other contemplative exercises as means to explore the relationship between inner and outer peace. Fulfills HU and DIV13 requirements. *Also offered as PEAC 102.*

108. Introduction to African Studies.

This course serves as a broad, interdisciplinary introduction to the study of Africa. Course materials and readings are designed to give special emphasis to African initiatives and perspectives in shaping their own history. African interactions in a global context are emphasized to highlight issues such as the Atlantic slave trade and colonization. Other topics include cultural diversity, geography and environment, religious expression, and development. At the end of the course students will be able to see how Africans have participated in world historical events and explain the many forces that have shaped African societies over the past 500 years. Fulfills HU and DIV13 requirements. *Also offered as AFS 101.*

109. Introduction to European Studies.

This course is an introduction to the histories and cultures of what we now call Europe, with particular focus on the different ways inhabitants of the region have defined their identities, especially in relation

to other groups (from the Greco-Roman idea of “civilization” and “barbarians” to the medieval vision of “Christendom” to the Cold War division between Eastern and Western Europe to the current European Union). We explore the geographical, social, and cultural worlds of Europeans in several historical moments and in the present, but do not survey the entire history of “western civilization.” The course will also consider how European culture and history relate to the history of the rest of the world. Fulfills HU and DIV13 requirements. *Also offered through European Studies.*

#### 110. The Scientific Revolution.

This course covers the development of scientific thought in the period 1500 to 1725. It examines changing views of nature in the fields of anatomy and physiology, astronomy, and physics. Although the primary focus is on specific scientific developments, they are discussed in the context of concurrent social, economic, and religious changes. *Also offered as PHYS 110 and through European Studies.*

#### 111. History of Funk (0.5 credits)

The History of Funk is a 0.5-unit course centered on the study of the R&B, Soul, and Funk music of the 1950s-1970s in both the immediate context of the Civil Rights revolution in the US, and in the broader context of the history and practice of the African musical diaspora. The course does not require musical training or ensemble participation; it will meet at several points during the semester with the SLU Funk ensemble, to experience musical work that echoes the performance aesthetics of the genres that we will study. Students will, in the form of essays and with the opportunity for more artistic assignment responses, investigate a music that became a voice and artistic reflection of a crucial moment and movement in American history.

#### 115. Introduction to Caribbean and Latin American Studies.

This course is an introduction to the richness of Caribbean and Latin American cultures, the region’s turbulent history of conquest and colonization, the diversity of its peoples and history, and the challenges of its development. An important objective of the course is to examine our individual places in the histories of the Americas in comparative perspective. The course provides a framework for study on St. Lawrence’s Costa Rica or Trinidad programs.

#### 160. Introduction to Middle East Studies.

This course is designed as an introduction to the history of the Middle East and to some of the ways in which historians have approached that history. Topics to be considered include the development of classical Islamic culture, the nature of the Sunni–Shii split, the role of non-Muslims in Islamicate societies, jihad, gender and sexuality, and the relationship of the Middle Eastern history to wider historical changes. No previous knowledge or background in Islam or Middle Eastern history is required or expected. Fulfills HU requirement. *Also offered through Peace Studies.*

### **200-Level Courses**

Courses at the 200-level are more temporally, geographically, and/or thematically focused than those at the 100-level. Most are appropriate for students at any level, with some exceptions as indicated in APR2. HIST 299 is intended only for sophomores and juniors.

203. Early Canada, 1534-1867.

After laying eyes upon the eastern coast of Canada in May 1534, the French explorer Jacques Cartier remarked that it resembled the “land that God gave to Cain.” Despite Cartier’s initial misgivings, Canada presented numerous opportunities to Europeans, as it had for the First Nations. For three centuries, the northern half of North America was an imperial domain of the French, and then of the British. In 1867, the Dominion of Canada was created, and the first steps toward the Canada that we know today were taken. This course explores the political, economic, social, and cultural life of Early Canada, from the age of European contact to Confederation. *Also offered through Canadian Studies.*

204. Modern Canada.

On July 1, 1867, the three British North American colonies of Nova Scotia, New Brunswick, and the United Province of Canada (early Québec and Ontario) joined to create the Dominion of Canada. From the time of Confederation to the end of the Great War, Canada remained in the shadow of Great Britain. In the period following the war, the dominion moved toward closer relations with the United States. It is between these two empires, one across the Atlantic Ocean, the other on the North American continent, that Canada’s evolution as a nation might be understood in the broadest sense. Yet, such an approach masks the internal forces that moved Canada from dominion status to one of the world’s most prolific international actors of the twentieth century. In this course, we will examine the “making” of modern Canada from Confederation to the end of the twentieth century by focusing upon the imperial and continental contexts, as well as domestic political, economic, social, and cultural factors. *Fulfills HU requirement. Also offered through Canadian Studies.*

205. Nineteenth-Century Europe.

An overview of the political, social, cultural, and intellectual history of Europe in the 19th century, from the French Revolution to the outbreak of the First World War. This era saw the disintegration of previous ways of understanding the world and the rise of new visions of cultural, social, and political organization. Movements including liberalism, nationalism, socialism, feminism, and imperialism sought to reshape the European landscape, while economic and scientific transformations altered Europeans’ experience and perception of the world. We consider a variety of texts, including novels, poetry, speeches, manifestos, visual art, and music. *Fulfills HU requirement. Also offered through European Studies.*

206. Twentieth-Century Europe.

An overview of the political, social, cultural, and intellectual history of Europe in the 20th century. Wars, economic upheavals, revolutions, and genocidal atrocities reshaped Europe in the first half of the century, radically altering the physical and psychic landscape. Feminism, socialism, communism, and fascism challenged the political system, while the intellectual and artistic avant-garde questioned basic assumptions of European culture. The Cold War, decolonization, and attempts to express a new European identity defined the second half of the century. We consider a variety of texts, including novels, poetry, speeches, art, and films. *Fulfills HU requirement. Also offered through European Studies.*

207. Civil War and Reconstruction.

This course addresses the social, political, and cultural issues surrounding the Civil War and the efforts to resolve them before, during, and after the war. While attention is paid to the military nature of the conflict, special emphasis is on social and political developments that shaped the Civil War and Reconstruction eras. Topics of study include the road to disunion; the dismantling of slavery; race relations before, during, and after the conflict; amendments to the constitution; and the construction of citizenship in the post-war era. Fulfills HU requirement.

208. Ottoman Empire and Early Modern Europe.

This course examines the rise and development of the Ottoman Empire from its origins in early 14th-century Anatolia to the end of the 18th century. In addition to tracing the development of political and military institutions, the course explores changing social relations, with particular attention to the role of women and non-Muslim populations in Ottoman society. A particular emphasis is the relation of the Ottoman Empire to wider global trends and its diplomatic, military, and cultural interactions with Europe. Fulfills HU requirement.

209. Medieval Europe

This introductory course examines the cultural and religious history of encounter and exchange in Europe between approximately AD 500 and 1500. This period from the Fall of Rome to the European exploration of the Americas is a diverse one thousand years of history that historians have called "medieval" from medium aevum, or "middle age" in Latin. We will focus on both the individual flashpoints and long-term processes of how Europe encountered diverse Christian, Jewish, pagan, and Muslim cultures, emerging empires, and trade networks both within and beyond its own borders, including topics such as the Crusades, barbarian hordes, Gothic architecture, the Black Death, and pilgrims' badges. By studying historical events and individuals through material objects as well as primary documents in hands-on activities, students will understand the rich diversity of European society in the medieval period. Fulfills HU requirement.

210. Renaissance & Reformation

From the rebirth of classical culture in the Renaissance to the religious violence of the Reformation, early modern Europe witnessed a significant period of change in the three hundred years between c. 1500 and c. 1800. This course will focus on larger movements and themes in the religious, cultural, and political histories of Europe while also placing special emphasis on the material culture of global trade and cultural exchange between Europe and the world. Europeans traveled and consumed the globe with terrible consequences for indigenous peoples enslaved in the name of profit and religion. By studying these events, individuals, and material objects—such as the St. Bartholomew's Day Massacre, imitation porcelain in Mexico, the bones of Incan warriors, and the erudite letters and art of Renaissance women—we will understand how European society defined itself in relation to others in the tumultuous early modern period. Fulfills HU requirement.

211. Women in Modern Europe, 1750 to the Present.

This course surveys the roles of women in the political, economic, and social history of modern Europe. Beginning with the 18th century, the course traces the public and private activities of women and the changing cultural definitions of those activities up to the present. Topics include the Enlightenment, industrialization, revolutionary and wartime activities, feminist movements, and the rise of the welfare state. Fulfills HU. *Also offered through European Studies.*

213. Global Environmental History.

What myths and theories have various societies created about their natural environment? How have they understood their place in the natural order? How have they changed their environment and been changed by it? This course explores environmental history, focusing on how humans have interacted with nature over time. In environmental history, animals, plants, diseases and climate are actors as much as humans and human institutions. We examine case studies from around the world including Asia, Europe and North America in a variety of time periods from ancient to modern. Fulfills HU and EL requirements.

215. US Environmental History

A survey of major themes in U.S. environmental history between ca. 1500 to the end of the 20th century. These themes include how people have thought about the natural environment and how we have changed and been changed by the environment over the last few centuries. Along with a narrative textbook, we will use readings from primary documents and scholarly articles to look in depth at a smaller number of topics. These include studies on Native American peoples' relationship to the land, the ecology of Colonial New England, and comparative forms of agriculture from colonial to recent times, with a particular focus on farming in the Midwest. Fulfills HU and EL requirements.

222. Unplanned Republic 1607-1789

A topical survey of the political, cultural and economic developments during the colonial era leading to the creation of the United States. Particular attention is paid to interaction between European settlers, Native Americans and African Americans and the role this interaction played in shaping a distinctive American culture. Fulfills HU requirement.

223. Union in Crisis: US 1787-1877

What an exciting time in American history! A new republic, a democratic experiment, an opportunity to make America the beacon of freedom in the world. And yet, in this new republic were enslaved men and women, Native American men and women whose very right to exist was continually challenged, women who were legally, socially, and politically subordinate to men, and new immigrants arriving every day. How would this experiment in democracy fare? Why was it that in a matter of decades, the Union would come to civil war? We'll read primary and secondary documents to answer these questions. Fulfills HU requirement.

224. The Gilded Age to the Great Depression, 1870s to 1930s

The name of the historical period known as "The Gilded Age" comes from a satirical novel of the same name (1873) by Mark Twain and Charles Dudley. In the authors' depiction, behind the sparkling wealth amassed during the Industrial Revolution lurked men's unbridled greed and political corruption. This course examines the social, cultural, and political history of the United States in the aftermath of the Civil War. Topics include industrialization and the urbanization and immigration that accompanied it, workers' collective efforts to improve their working conditions and compensation, westward expansion of the United States into the lands of Native Americans and others already there, the re-establishment of racial hierarchy in the post-slavery South, American imperialism in the Caribbean and Pacific, movements to reform politics and society, the woman suffrage movement, World War I, the 1920s, and the Great Depression.

226: The United States from World War II to the Present

Exploration and analysis of American society, culture, domestic politics, and foreign relations since World War II. This period encompasses the emergence of the Cold War and the construction of what President Dwight Eisenhower called "the military industrial complex"; the "Red Scare" in the United States and anticommunism in foreign relations; changes in the US and global economies; the "new" immigration; movements for racial and gender equality; transformations in attitudes about sexuality and disabilities; conservative reactions to social and cultural changes; the aftermath of the Cold War; the computer and internet revolutions; the increasing gulf between the wealthy and the rest of us; and the political and cultural wars we experience today.

229. Introduction to Native American History.

This course introduces students to key themes in the study of the history of indigenous peoples, focusing primarily on those peoples' theme of Native peoples' reactive adaptations to historical change. Fulfills HU and DIV13 requirements. *Also offered through Native American Studies and Peace Studies.*

230. The Middle East in the Nineteenth Century.

This course examines the "long 19th Century" in the Middle East, from the end of the eighteenth century to ca. 1920. In doing so, it will center on the chief questions of the era: European imperial intervention, nationalism, and the challenges of modernization. Key questions will include integration into world markets, the development of Islamic modernism, sectarianism and communal violence, and the changing status of women and non-Muslims. No previous knowledge of the Middle East is required or expected for this course. Fulfills HU requirement.

231. The Modern Middle East.

This course examines the history of the Middle East from the end of World War I to the present. The class addresses issues such as the development of national states, the rise of political Islam, changing understandings of gender and sexuality, the Arab-Israeli Conflict, oil, growing US involvement in the Middle East. A central focus of the class is understanding the contemporary Middle East in its historical context.

232. Cultures of China through Fiction and Film.

This course is designed to introduce the history and culture of China from its earliest beginnings to the late 19th century, covering Chinese institutions, philosophical trends, religions, literature, arts, and special topics such as gender and family, love and friendship, dream and soul, among others. Materials include Confucian and Taoist classics, Buddhist scriptures, literary and artistic works and films, as well as modern scholarly publications. All readings are in English. No knowledge about China and Chinese language is required.

233. Colonial Latin America.

This course surveys the formation and historical development of colonial Latin America. We begin with initial encounters between indigenous peoples of the Americas and Iberians in the 15th century and end with Portugal and Spain's loss of their mainland colonies in the Americas in the 1820s. Part of our task is to understand the dynamics of race, class, and gender in the colonial societies that developed from the violent collision of cultures during the conquest. Fulfills HU requirement. *Also offered through Caribbean, Latin American, and Latino Studies and Peace Studies.* Fulfills HU requirement.

234. Modern Latin America.

This course surveys the history and development of modern Latin America. We begin with a brief overview of the colonial and early national periods, but the main focus of the course is from 1870 to the present. Some of the issues that concern us include the historical roots of the human and cultural diversity of modern Latin America, the region's relationships to a changing world economy, politics and human rights, and migration and diasporic cultures. Fulfills HU and DIV13 requirements. *Also offered through Caribbean, Latin American, and Latino Studies and Peace Studies.*

239. Imperial Spain.

This course considers Spain as both an agent and an object of colonization. Its chronological sweep is broad, from ancient times through the 19th century. The central portion of the course focuses on Spain at the height of its imperial power, from the mid-16th to the mid-17th centuries, with Miguel de Cervantes' *Don Quijote* (in a modern English translation) as an important source. Themes include religious, cultural and racial diversity in Spain and its empire, and the price of empire for Spanish development. Fulfills HU requirement.

243. Origins of U.S. Foreign Policy (Colonial Era to 1900).

Since its creation, the United States has been connected with the wider world through trade, immigration, territorial expansion, diplomacy, and war. This course examines the roots and characteristics of American foreign policy and foreign relations from colonial times through the nineteenth century, while giving attention to how domestic politics, public opinion, society, and culture responded to and shaped government policies and international relations. We also consider how ideas about race and gender influenced policies and relations with other nations; how the territorial expansion of the United States affected Native Americans; and how the peoples of other nations responded to U.S. policies. Fulfills HU requirement. *Also offered through Peace Studies.*

244. U.S. Foreign Relations 1900-1945.

A history of the development of U.S. foreign policy and relations, beginning with the war in the Philippines at the turn of the century, and continuing through the Second World War and the emergence of the Cold War. In addition to examining traditional diplomacy and economic relations, we consider how public opinion and assumptions about race, ethnicity, and gender influenced U.S. foreign policy and actions. We also examine international responses to U.S. government policies and actions and to the expansion of American culture abroad. Fulfills HU requirement. *Also offered through Peace Studies.*

246. The Cold War.

The United States and the Soviet Union were the rival superpowers in the Cold War, but European, African, Asian, and Latin American and Caribbean nations also were enmeshed in the conflict, sometimes in “hot” wars that killed hundreds of thousands of people and devastated communities and natural environments. In class lectures, discussions, and research-based presentations, this course explores answers to such questions as: What caused the Cold War, and could it have been avoided? How did the Cold War affect international and domestic politics, everyday life, and culture in various nations? Why did it finally end (or did it)? What are the legacies of the Cold War? Fulfills HU requirement. *Also offered through Peace Studies.*

252. Conflict in Africa.

From discussions of Darfur, to genocide in Rwanda, conflict is often the center of contemporary discourse about Africa. But what do we mean by conflict in Africa? Is it as violent and widespread as the media portrays? This course uses case studies throughout the last two centuries of African history to examine broad social and political dimensions of conflict. Cases examine issues such as colonialism, ethnicity, generational tensions, and genocide from diverse perspectives. The course is primarily discussion based and will challenge students to develop their thoughts on issues through oral debates and writing assignments. No prerequisites are required. Fulfills HU requirement. *Also offered as AFS 252 and through Peace Studies.*

253. Colonial British America.

In this course we examine the lives of the Native American, European, and African inhabitants of Colonial British America. The history of colonial British America includes more than stereotypes of Puritans, Plymouth Rock, Thanksgiving, and witches. By focusing on the social, economic, and intellectual factors that comprised the colonial world, we come to understand the influences that reach beyond this era into the present day. Fulfills HU requirement.

254. History of Modern France, 1815 to the Present.

This course provides an upper-level survey of French history from the Restoration through the Fifth Republic. The legacy of the 1789 Revolution, the origins of the Dreyfus Affair, the Vichy Regime and the Resistance, de Beauvoir’s feminism, de Gaulle’s and Mitterand’s presidencies, the rise of the National Front, and the confrontation between Islam and republicanism are among many topics explored. The

course includes cultural and social history as well as politics and foreign policy. Fulfills HU requirement. *Also offered through European Studies.*

256. Slavery and Freedom in the Americas.

This course surveys the genesis and dissolution of the transatlantic slave trade and the slave societies that created the demand for this trade in both North and South America and the Caribbean. The perspective is Atlantic in scope, trying to understand the impact of this forced migration on Africa and Africans and on American societies, defined as all of the Americas, not just the U.S. We also discuss some of the movements to abolish the slave trade and slavery itself, examining how the people involved defined freedom. Fulfills HU and DIV13 requirements. *Also offered through African American Studies, Caribbean, Latin American, and Latino Studies and Peace Studies.*

263. African American History to 1865.

A survey of the social, political, cultural, and economic history of African Americans from the 1600s to the end of the Civil War. Topics include the Atlantic slave trade, colonial and antebellum slavery, family life, resistance to slavery and African Americans' participation in the Civil War, and contributions to the building of the nation. Fulfills HU requirement. *Also offered through African American Studies.*

264. African American History, 1865-Present.

A survey of the social, political, cultural, and economic history of African Americans from 1865 to the present day. Topics include Reconstruction, the implementation of segregation, the Harlem Renaissance, African Americans' participation in both World Wars and Vietnam, the civil rights movement, the black power movement, and activism in the 1980s and 1990s. Fulfills HU and DIV 13 requirements. *Also offered through African American Studies.*

267. The Holocaust.

This course focuses on the development of the Holocaust from 1933 to 1945, with attention to the motives of its perpetrators and the experience of victims and bystanders. Topics include historical Christian anti-Judaism and the creation of modern anti-Semitism, legal exclusion of Jews from German life under the Nazis, ghettoization of Eastern European Jews, and the development of Nazi policy from ethnic cleansing to genocide. The course also explores the relationship between the genocide perpetrated against the Jews and Nazi persecution of other groups such as Slavs, Roma, and the disabled. Finally, we consider the Holocaust's legacies for Jewish and German identity, and for understanding genocide broadly. Fulfills HU requirement. *Also offered as REL 267 and through European Studies and Peace Studies.*

272. The New South.

A survey of the history of the Southern United States from Reconstruction to the present. The primary focus is on the political, economic, and social history of the South, although attention is paid to its cultural history, especially through an examination of stereotypes about the South. A major theme is the interrogation of the notion of Southern "distinctiveness," how that notion has served the needs of the

nation outside the South, and whether the South is still a culturally distinct region. Fulfills HU requirement. *Also offered through African American Studies.*

273. Civil Rights Movement.

This course examines the civil rights movement from *Brown v. Board of Education* to the battles over Affirmative Action at the nation's most prestigious colleges and universities today. The course traces the ideological developments and struggles in the movement, especially as major protest activities spread outside the South to the North and West; it focuses on the events of the movement and on the disagreements over strategies, tactics, and goals among various civil rights organizations and leaders. The course uses various texts to explore the movement, including memoirs, scholarly articles and monographs, Hollywood feature films, and documentaries. Fulfills HU requirement. *Also offered through African American Studies and Peace Studies.*

280. History of Women in America (1600-1920).

This course examines the history of women in the United States in the context of broad social changes between 1600 and 1920. Political, social, legal, demographic, and economic changes all shaped and informed the experiences of women in the colonies and the United States; the course examines how women responded to these changes and how they worked to bring about changes that improved the circumstances of their lives. Gender relations, race relations, industrialization, immigration, and family structure provide focal points throughout the course. Fulfills HU and DIV13 requirement.

282. Modern Japan.

This course covers Japanese history from the Tokugawa to the present. Treatment is thematic, including the rise and fall of the Tokugawa, Japan's encounter with the imperialist powers, Taisho democracy, World War II, and social/economic trends since that war. We will read novels, memoirs, and biographies, and use film as well. Students will write response papers on the readings, give oral presentations on research projects, and take turns leading discussion. Fulfills HU requirement.

286. Modern Iran.

This course examines the history of Iran in the modern era. After an overview of Iran under Safavid rule and the early Qajars, this course will focus on social, political, and cultural transformations in Iran from the late 19th century to the present. Topics of particular interest will include the question of "modernity," the role of the ulema, the Constitutional and Islamic revolutions, the rise of political Islam, the role of Iran in regional politics, and issues of gender and sexuality. Classes will alternate between formal lectures and seminar-style discussions. The instructor assumes motivated students willing to work and to be challenged.

289. Independent Study.

Designed for the exploration in depth of a topic not covered by an existing course, an independent project requires a proposal designed with the faculty sponsor that is approved by the department chair the semester prior to its undertaking. Only one such course may count toward the major or minor.

292. Modern China.

This course covers three revolutions in modern Chinese history: 1) the rise of the Communist Party; 2) the Cultural Revolution of 1966-1976, using memoirs of Chinese who lived through that decade; 3) the “economic revolution” of the 1980s and 1990s in the context of the Pacific Rim region. Fulfills HU requirement. *Also offered through Asian Studies and Peace Studies.*

293. Public History.

History is an active process and much of historians’ research takes place in archives and libraries. In this course we explore the field of public history, which includes the collection, cataloging and dissemination of histories that takes place through public sites such as libraries, historical societies and museums. We also practice in the field with an examination of the histories of Canton, St. Lawrence County, and the North Country. The course introduces and utilizes various tools of the discipline of history, such as document analysis, critical reviews, and an understanding of historiography as we research and write local history. Part of the research into this second element of the course will take place through an internship at a local institution such as a historical society or museum. Fulfills HU requirement.

299. Seminar on Historical Research Methods.

This course, required for the major and the minor in history, is designed to offer students an opportunity to learn about and practice the tools of the historian’s craft while examining a particular topic in detail. The main focus is the “history of the history” of the particular topic, also known as historiography. While topics vary, the course proceeds in seminar fashion and entails extensive reading and writing assignments. Fulfills HU requirement. Prerequisite: a 100- or 200-level history course.

The content of each course or section of these 200-level special topics courses varies and will be announced each semester.

### 300-Level Courses

Courses at the 300 level are discussion-based seminars that explore a focused topic in depth, utilizing a variety of tools of historical analysis. They generally include an expectation of student research. Students registering for 300-level courses must have at least one 100- or 200-level history course or permission of the instructor.

308. European Imperialisms.

The development, transformations, and decline of European imperialism with an emphasis on the 19th and 20th centuries. We focus on the ways that European constructions of gender and race influenced and were influenced by the encounters between colonizer and colonized. A partial list of topics includes the French in North and West Africa and Southeast Asia, the Dutch in the East Indies and Southern Africa, and the British in Ireland and India. Fulfills HU requirement. *Also offered through African Studies, European Studies, and Peace Studies.*

321. Senegal in the World.

Senegalese culture and society emerged from the interactions of groups that circulated in, out, and back to the western-most section of Africa over centuries: indigenous fishing people, pastoralists, farmers and craftspeople; Arab traders and religious teachers; French colonial forces; West African soldiers and students among others. Today Senegalese citizens live, work, and move (sometimes at great risk) throughout the world. In this course, we will explore these encounters and their consequences with the goal of developing a more nuanced understanding of the complex society that is Senegal today. Fulfills HU requirement. *Also offered through African Studies.*

325. The Vietnam War.

In this seminar we will examine what Vietnamese call "the American War" (1950s to 1973), as well as key events preceding this, and the aftermath of the communists' victory in 1975. To understand what is more broadly considered "The Second Indochina War," it is necessary to learn about earlier Chinese, French, and Japanese efforts to control the region known as Indochina. Moreover, what Americans think of as "The Vietnam War" involved many nations, among them the People's Republic of China, the Soviet Union, South Korea, Thailand, Australia, and New Zealand. We consider a variety of perspectives: those of Vietnamese communists, anti-communists, and "the people in the middle"; of other countries' supporters and opponents of the war, including policymakers, soldiers, and demonstrators; and of Laotians and Cambodians who also experienced war. We also examine how the war influenced American domestic politics, society, and culture—and continues to do so. Fulfills HU requirement. *Also offered through Peace Studies.*

331. Imagining the South.

"You should need a passport to come down here." In 2002, a character in the movie *Sweet Home Alabama* used these words to characterize the South as a region so unlike the rest of the nation that it is better thought of as a foreign country. This course explores the various ways in which the South has been depicted by non-Southerners and Southerners alike. A variety of genres — historical texts, memoir, fiction, film, music — are used to interrogate the images of the South and to ask what national purposes these images have served and continue to serve. Fulfills HU requirement. *Also offered through African American Studies.*

333. The Age of the American Revolution.

An in-depth examination of the causes, progress, and consequences of the American Revolution, including a summary of the constitutional, economic, and social development of the colonies to 1763; the alteration of British colonial policy after 1763 and the American response; internal unrest within the colonies; the development of a revolutionary movement culminating in the Declaration of Independence; the war to secure independence; and the Constitution of 1787. Fulfills HU requirement. *Also offered through Native American Studies and Peace Studies.*

335. Abraham Lincoln, Frederick Douglass, and the Civil War. Description:

If we are truly to understand the impact of the war on American society, we must carefully consider the roles that Abraham Lincoln and Frederick Douglass played in shaping the events of the day and how

people understood them. This semester we'll examine the era of the Civil War from the perspectives of the President and Commander-in-Chief as well as the former slave who captured the world's attention as an ardent abolitionist and civil rights advocate. To better understand the era, we'll look at the letters, speeches, and writings of both men and explore the roles they played in their extraordinary times. Fulfills HU requirement.

340. Race, Ethnicity, and Baseball.

This course takes a historical and philosophical look at race and ethnic relations in the United States since the Civil War as reflected in the history of professional baseball both on and off the field. Throughout the course, we will devote our attention to epistemological and moral questions related to race and ethnicity. What is race or ethnicity? Do we have a moral obligation to eradicate discrimination based on race or ethnicity? Fulfills HU requirement.

352. Playing Indian: Native American Stereotypes in American History and Imagination.

When are Indians not Native Americans? When they are the stereotypes created as expressions of the cultural and historical hegemony of a predominantly non-Native society that obscures the diverse realities of the real people. Since the 15th century, when Native peoples were named "Indians" by a very confused explorer, Natives have been regarded as more historical objects than agents. We discuss the historical construction and use of "Indians" by colonists, modern (non-Native) Americans, and Native Americans themselves, and examine Indian stereotypes in the construction of the American ideal in history, art, film, literature, television, and music. Fulfills HU and DIV13 requirements. *Also offered through Native American Studies.*

365. Colloquium in American History.

Topics vary. Consult the semester course schedule for current offerings.

368. Palestine and the Arab-Israeli Conflict.

This class explores the development of two competing nationalism movements, Israeli and Palestinian, from their roots in the 19th century to the present day. Beyond gaining an understanding of the development of "the conflict," this course pays particular attention to the development of both Israeli and Palestinian identities and societies. Other key considerations are the interaction between politics and history and an examination of some of the key historiographical debates in the field, including the wars of 1948 and 1967, the peace process, and the "authenticity" of national constructions and nationalist claims. Texts include secondary and primary source readings, novels, and films. Fulfills HU requirement.

371. Eighteenth-Century Europe and the French Revolution.

This course examines the origins of the French Revolution in 18th-century Europe and the revolution itself. Topics include social, economic, and cultural as well as political questions; the consequences of the revolution for France, Europe, and the world up to 1815 are considered. The ever-changing

historiography of the revolution provides the organizing principle for the course. Fulfills HU requirement. *Also offered through European Studies and Peace Studies.*

372. European Identities, 1700-2000.

This seminar examines the construction and transformation of European identity in the 19th and 20th centuries. The impact of the encounters between Europeans and non-Europeans on the culture and society of both old and new Europe is a particular focus. Beginning with the debates on national identity in the early 19th century and continuing with inter-European migration and colonial expansion, the course examines the developing relationship between European and colonial peoples that led to the establishment of significant immigrant communities in the West. The course concludes with an assessment of topics relevant to current European social and political concerns. Fulfills HU requirement. *Also offered through European Studies.*

373. Japan and the United States in World War II, 1931-1952.

In this course we examine the relationship between Japan and the United States in the 1930s, 1940s and 1950s. We discuss anti-war political activism in the U.S. and Japan, the internment of Japanese Americans, the role of propaganda in both countries, the bombing of Hiroshima and Nagasaki, and the Allied occupation of Japan after the war. We work on writing and oral communication skills and discuss such concerns as how cultures understand and misunderstand each other. Fulfills HU requirement. *Also offered through Peace Studies.*

375. Colloquium in European History.

Topics vary; consult the semester course schedule for current offerings. *Also offered through European Studies.*

376. Colloquium in African History.

Topics vary; consult the semester course schedule for current offerings.

377. Colloquium in Asian History.

Topics vary; consult the semester course schedule for current offerings. *Also offered through Asian Studies.*

378. Colloquium in Caribbean and Latin American History.

Topics vary; consult the semester course schedule for current offerings. *Also offered through Caribbean, Latin American, and Latino Studies.*

379. Colloquium in Middle Eastern History.

Topics vary; consult the semester course schedule for current offerings.

### 382. Genocide in the Modern World.

The last two centuries have seen mass violence on a scale unprecedented in human history. Among the most horrifying forms this violence took was the attempt to systematically exterminate whole religious/ethnic/national groups, which Raphael Lemkin coined the term “genocide” to describe. In this course, we examine individual historical cases of genocide (including the colonial killings of indigenous peoples, the Armenian genocide, the Holocaust, Khmer Rouge Cambodia, and the Rwandan genocide) and also consider theoretical approaches that seek to explain its causes and dynamics. We also survey the history of attempts to prevent genocide. Fulfills HU requirement. *Also offered through Peace Studies.*

### 400-Level Courses

471-480. SYE: Senior Seminars.

Senior seminars, restricted to senior majors and minors, are normally limited to 10 students and require the production of a substantial research paper that includes original research. Successful completion of an SYE seminar course, an independent-study SYE, or honors thesis is required for the major. Topics vary; consult the semester course schedule for current offerings. Prerequisite: HIST 299.

471-472. SYE: Seminars in European History.

Also offered through European Studies.

473-474. SYE: Seminars in American History.

475-476. SYE: Seminars in Asian History.

Also offered through Asian Studies.

477-478. SYE: Seminars in Comparative History.

480. SYE: Seminar in Contemporary Africa.

From political strife to economic and social challenges, contemporary African issues current are often described as primordial conditions or products of recent political failures. However, to understand Africa today, one must move beyond these simplistic explanations. This course will challenge students to use an interdisciplinary approach to examine how contemporary issues must be examined within a complex historical framework. As a research seminar a substantial portion of class time and assignments are devoted to producing a significant research paper. A background in history and African studies is strongly recommended. Fulfills HU requirement. *Also offered as African Studies 480.*

481, 482. Internships.

These courses provide an opportunity for qualified juniors and seniors to obtain credit for work at local, state, or national historical agencies, archives, or museums. Supervision is provided by the host agency.

Responsibility for evaluating the experience rests with the history department faculty coordinator. The internship must be set up in the prior semester at the initiative of the student, in consultation with one faculty member and the chair. Prerequisite: permission of instructor and chair of the department.

489, 490. SYE: Independent Study.

To qualify, students must have a 3.2 GPA in the history department. Normally, students should have senior standing, with a major or minor in history. Applicants must demonstrate that the study they wish to pursue has serious intellectual merit and that their objectives cannot be accomplished within the framework of existing course offerings. This course must be set up in the prior semester. Prerequisite: permission of instructor and chair of the department.

498, 499. SYE: Honors Thesis.

## International Economics and World Languages

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Four majors offered.

Visit the program's webpage at <https://www.stlawu.edu/offices/economics/international-economics-modern-languages-combined-major>.

### Requirements in International Economics for All Majors

#### Economics

- 100. Introduction to Economics. (1 unit)
- 200. Quantitative Methods in Economics.\* (1.5 unit)
- 251. Intermediate Microeconomics Theory.\*\* (1 unit)
- 252. Intermediate Macroeconomics Theory.\*\* (1 unit)

THREE electives in Economics (3 units)

At least two of these electives at the 300/400 level. At least two of these electives must include:

- 236. Globalization Issues.
- 322. International Economics.
- 336. Economic Development.

**Total:** 7.5 units

\*STAT 113 (Applied Statistics) is a prerequisite for 200. Students who pass STAT 213 (with a grade of 2.0 or higher)

may choose an additional economics elective (at the 200 or higher level) in lieu of ECON 200.

\*\*ECON 251 and 252 must be passed with a grade of 2.0 or higher.

## Requirements for the International Economics and French Major

### Economics

Requirements from above (7.5 units)

World Languages – French

SEVEN units at the 103 or higher level (7 units)

**Total:** 14.5 units

\*Students already proficient at the intermediate level will receive credit for 103 and 104 upon completion of a higher level course in French and will need only 5 units of French to complete the major.

## Requirements for the International Economics and World Languages Major

### Economics

Requirements from above (7.5 units)

Arabic, Chinese, German and Italian:

Required courses – Seven courses at the 101 or higher level. Students already proficient at the intermediate level will receive credit for 101 and 102 upon completion of a higher-level course in this language and will need only five units of this language to complete the major.

Students must check with the department to make sure that the courses needed to complete this major are offered.

## Requirements for the International Economics and Spanish Major

### Economics

Requirements from above (7.5 units)

World Languages – Spanish

SEVEN units at the 103 or higher level (7 units)

**Total:** 14.5 units

\*Students already proficient at the intermediate level will receive credit for 103 and 104 upon completion of a higher level course in Spanish and will need only 5 units of Spanish to complete the major.

## Requirements for the International Economics and Multilanguage Major

### Economics

Requirements from above (7.5 units)

Multi-language:

Three courses in one language plus three courses in the concentration language at the 103 level and above.

**Total:** 13.5 units

Although not required, participation in an abroad program related to one's language specialization is strongly recommended.

### Honors

Graduation with honors may be recommended upon the basis of grades, the completion of an honors project approved and supervised by a faculty member, and an oral presentation on the thesis. Students who expect to undertake such a program should consult with the chairs of the Economics and World Languages, Cultures, and Media departments in the last term of their junior year. Such projects must have the approval of both departments.

## Mathematics

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*Instruction in this department is intended to aid in the development of exact, concise, and independent reasoning, to cultivate the imagination and to inspire habits of original and independent thought.*

*This sentence has appeared in every St. Lawrence Catalog since 1896*

Major and minor offered under the auspices of the mathematics, computer science and statistics department. Visit the department web page at <https://www.stlawu.edu/offices/math-computer-science-and-statistics>.

### Major Requirements

The requirements for a major in mathematics are 11 units, including four core mathematics courses, one analysis course, one algebra course, five electives, and a senior-year experience.

#### Foundational Courses

- |           |                         |
|-----------|-------------------------|
| MATH 135. | Calculus I.             |
| MATH 136. | Calculus II.            |
| MATH 205. | Multivariable Calculus. |

MATH 280. Bridge to Higher Mathematics

### **Analysis**

MATH 305. Real Analysis.

MATH 306. Complex Analysis.

### **Algebra**

MATH 315. Group Theory.

MATH 316. Ring Theory

### **Elective Courses**

Three at the 200-level or above and two at the 300-level or above. STAT 113 and CS 140 may count as 200-level electives. Any course cross-listed as MATH or STAT may also count.

## **Senior-Year Experience**

Students must fulfill a Senior-Year Experience (SYE) requirement in mathematics as one of the 11 units in the major, by completing an SYE outside the major, or by completing an internship approved by the department chair.

## **Honors**

Honors work in mathematics provides the student with an opportunity for more independent and creative work in pure or applied mathematics. A minimum GPA of 3.5 in the major is required to receive honors in mathematics. In addition, each student applying for honors must complete a departmentally approved honors project. This work is completed as a senior year experience project. Interested students should consult the department chair.

## **Notes**

Students who have seen some calculus before are encouraged to register for MATH 136 (Calculus II) or MATH 205 (Multivariable Calculus). Students who pass MATH 136 will receive credit for MATH 135. Students who pass MATH 205 will receive credit for MATH 135 and MATH 136. This is true for all students who have taken any calculus course before college.

Students unsure of placement within the calculus sequence should talk to any member of the department.

Students planning on majoring in mathematics are encouraged to complete MATH 280 before the end of the sophomore year.

Students considering graduate work in mathematics are strongly encouraged to take MATH 217 (Linear Algebra) and MATH 305, 306 and 315, 316 (a full year each of analysis and algebra).

Students planning to participate in an off-campus program should seek early advice from the department on the best way to plan their major program.

## Minor Requirements

Seven units are required for this minor and must include MATH 135, MATH 136, and MATH 205. The four additional courses must be 200-level or above. STAT 113 and CS 140 may count as 200-level electives. Any course cross-listed as MATH or STAT may also count.

## Advanced Placement

Students who earn a 4 or 5 on the Calculus AB exam receive credit for MATH 135, and students who earn a 4 or 5 on the Calculus BC exam receive credit for MATH 135 and MATH 136.

## Major/Minor with Statistics

By their very nature, the disciplines of Mathematics and Statistics are closely connected, and several of the courses offered within the Mathematics, Computer Science, and Statistics department can be used towards a major or minor in both. However, to ensure that the students that wish to double major (or major and minor) in the two fields have sufficient depth of knowledge within each field, there are some limitations on the number of courses that can count towards both. Details can be found at the Mathematics, Computer Science, and Statistics department webpage: <https://www.stlawu.edu/offices/math-computer-science-and-statistics>.

## Related Programs

The department teams with economics and environmental studies to offer interdisciplinary majors in economics–mathematics and environmental studies–mathematics. The descriptions of those majors are under Economics and Environmental Studies, respectively.

## Courses

110. Concepts of Mathematics.

An introduction to significant ideas of mathematics, intended for students who will not specialize in mathematics or science. Topics are chosen to display historical perspective, mathematics as a universal language and as an art, and the logical structure of mathematics. This course is intended for non-majors; it does not count toward either the major or minor in mathematics.

123. Mathematics of Art.

This course explores the connections between mathematics and art: how mathematics can provide a vocabulary for describing and explaining art; how artists have used mathematics to achieve artistic

goals; and how art has been used to explain mathematical ideas. This course is intended for non-majors; it does not count toward either the major or minor in mathematics. Offered as scheduling allows.

134. Precalculus.

The development of skills and concepts necessary for the study of calculus. Topics include the algebraic, logarithmic, exponential, and trigonometric functions; Cartesian coordinates; and the interplay between algebraic and geometric problems. This course is intended for students whose background in high school was not strong enough to prepare them for calculus; it does not count toward the major or minor in mathematics. Students who have passed a calculus course (MATH 135, 136 or 205) may not receive course credit for MATH 134.

135. Calculus I.

The study of differential calculus. The focus is on understanding derivatives as a rate of change. Students also develop a deeper understanding of functions and how they are used in modeling natural phenomena. Topics include limits; continuity and differentiability; derivatives; graphing and optimization problems; and a wide variety of applications.

136. Calculus II.

The study of integral calculus. Topics include understanding Riemann sums and the definition of the definite integral; techniques of integration; approximation techniques; improper integrals; a wide variety of applications; and related topics. Prerequisite: MATH 135 or the equivalent.

205. Multivariable Calculus.

This course extends the fundamental concepts and applications of calculus, such as differentiation, integration, graphical analysis, and optimization, to functions of several variables. Additional topics include the gradient vector, parametric equations, and series. Prerequisite: MATH 136 or the equivalent.

206. Vector Calculus.

A direct continuation of Mathematics 205, the main focus of this course is the study of smooth vector fields on Euclidean spaces and their associated line and flux integrals over parameterized paths and surfaces. The main objective is to develop and prove the three fundamental integral theorems of vector calculus: the Fundamental Theorem of Calculus for Line Integrals, Green's Theorem, Stokes' Theorem, and the Divergence Theorem. Prerequisite: MATH 205. Offered as scheduling allows.

217. Linear Algebra.

A study of finite dimensional linear spaces, systems of linear equations, matrices, determinants, bases, linear transformations, change of bases and eigenvalues.

230. Differential Equations.

An introduction to the various methods of solving differential equations. Types of equations considered include first order ordinary equations and second order linear ordinary equations. Topics may include the Laplace transform, numerical methods, power series methods, systems of equations and an introduction to partial differential equations. Applications are presented. Prerequisite: MATH 136.

250. Mathematical Problem-Solving.

Students meet once a week to tackle a wide variety of appealing math problems, learn effective techniques for making progress on any problem, and spend time writing and presenting their solutions. Participation in the Putnam mathematics competition in early December is encouraged but not required. This course is worth 0.25 credit, meets once per week, and is graded pass/fail. Since topics vary from semester to semester, students may repeat this course for credit.

280. A Bridge to Higher Mathematics.

This course is designed to introduce students to the concepts and methods of higher mathematics. Techniques of mathematical proof are emphasized. Topics include logic, set theory, relations, functions, induction, cardinality, and others selected by the instructor.

302. Symbolic Logic

A study of elementary symbolic logic. Topics include sentential and predicate logic. Prerequisite MATH 280 or CS 220 or PHIL 202. *Also offered as PHIL 302 and CS 302.*

305. Real Analysis.

A rigorous introduction to fundamental concepts of real analysis. Topics may include sequences and series, power series, Taylor series and the calculus of power series; metric spaces, continuous functions on metric spaces, completeness, compactness, connectedness; sequences of functions, pointwise and uniform convergence of functions. Prerequisites: MATH 205 and 280. Offered in fall semester.

306. Complex Analysis.

Topics include algebra, geometry and topology of the complex number field, differential, and integral calculus of functions of a complex variable. Taylor and Laurent series, integral theorems, and applications. Prerequisites: MATH 205 and 280. Offered in spring semester.

315. Group Theory.

An introduction to the abstract theory of groups. Topics include the structure of groups, permutation groups, subgroups, and quotient groups. Prerequisite: MATH 280. Offered in spring semester.

316. Ring Theory.

An introduction to the abstract theory of algebraic structures including rings and fields. Topics may include ideals, quotients, the structure of fields, Galois theory. Prerequisite: MATH 280. Offered in fall semester.

318. Graph Theory.

Graph theory deals with the study of a finite set of points connected by lines. Problems in such diverse areas as transportation networks, social networks and chemical bonds can be formulated and solved by the use of graph theory. The course includes theory, algorithms, applications, and history. Prerequisite: MATH 217 or 280. Offered every other year. *Also offered as CS 318.*

319. Geometry.

This course presents a selection of nice results from Euclidean geometry, such as the Euler line, the nine-point circle and inversion. Students explore these topics dynamically using geometric construction software. A portion of the course is also devoted to non-Euclidean geometry, such as spherical, projective or hyperbolic geometry. This course is especially recommended for prospective secondary school teachers. Prerequisite: MATH 217 or MATH 280. Offered as scheduling allows.

321. Financial Mathematics.

An introduction to the modern mathematics of finance. This course develops the mathematics necessary in an arbitrage-free model to understand the connections and pricing of stocks, bonds, futures, forwards and a variety of derivatives and options. The course derives the Capital Asset Pricing Model for portfolio optimization and covers the theory behind the Black-Scholes model for pricing options. Offered as scheduling allows.

323. History of Mathematics.

This seminar is primarily for juniors and seniors and covers topics in the history of mathematics. Offered as scheduling allows.

325. Probability.

This course covers the theory of probability and random variables, counting methods, discrete and continuous distributions, mathematical expectation, multivariate random variables, functions of random variables and limit theorems. Prerequisite: MATH 205. Offered in the fall semester. *Also offered as STATS 325.*

333. Mathematical Methods of Physics.

Important problems in the physical sciences and engineering often require powerful mathematical methods for their solution. This course provides an introduction to the formalism of these methods and emphasizes their application to problems drawn from diverse areas of classical and modern physics.

Representative topics include the integral theorems of Gauss and Stokes, Fourier series, matrix methods, selected techniques from the theory of partial differential equations and the calculus of variations with applications to Lagrangian mechanics. The course also introduces students to the computer algebra system Mathematica as an aid in visualization and problem-solving. Prerequisites: MATH 205 and PHYS 152. Offered in fall semester. *Also offered as PHYS 333.*

#### 341. Number Theory.

The theory of numbers addresses questions concerning the integers, such as “Is there a formula for prime numbers?” This course covers the Euclidean algorithm, congruences, Diophantine equations and continued fractions. Further topics may include magic squares, quadratic fields or quadratic reciprocity. Prerequisite: MATH 217 or MATH 280 or permission of the instructor. Offered as scheduling allows.

#### 360. Combinatorics.

This class covers several problem-solving methods different from those seen in most other math classes. In particular, we will focus on the art of the combinatorial proof. This method lets us take something that may seem abstract and translate it into something concrete that we can count. Other methods and topics covered may include bijections, set theory, Fibonacci identities, Catalan numbers, and combinatorial games. Prerequisite: MATH 280. Offered as scheduling allows.

#### 370. Topology.

An introduction to topology. Topics may include the general notion of a topological space, subspaces, metrics, continuous maps, connectedness, compactness, deformation of curves (homotopy) and the fundamental group of a space. Prerequisite: MATH 280. Offered as scheduling allows.

#### 371. Dynamical Systems and an Introduction to Chaos

An introduction to discrete dynamical systems. The focus of this course is the dynamics of real functions. Topics include fixed point theory, orbit analysis, bifurcations, Sharkovsky’s Theorem, symbolic dynamics, and mathematical chaos. Additional topics, time permitting, include fractals, the dynamics of complex functions, the Mandelbrot set, and Julia sets. Prerequisites: MATH 280. Offered as scheduling allows.

#### 380. Theory of Computation.

The basic theoretical underpinnings of computer organization and programming. Topics include the Chomsky hierarchy of languages and how to design various classes of automata to recognize computer languages. Application of mathematical proof techniques to the study of automata and grammars enhances understanding of both proof and language. Prerequisites: MATH 280. Offered as scheduling allows. *Also offered as CS 380.*

#### 289, 389. Independent Study.

Permission required.

450. SYE: Senior Seminar.

Permission required.

489. SYE: Senior Project for Majors.

Permission required.

498. SYE: Senior Honors Project for Majors.

Permission required.

## Music

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Major and minor offered.

Visit the music department webpage at <https://www.stlawu.edu/offices/music>.

### Major Requirements

Students wishing to major in music must complete the following requirements:

- MUS 200 or 201.
- MUS 210.
- MUS 220.
- At least five other full-unit courses in music, two of which must be 300-level courses.
- At least three semesters of participation in a music department ensemble.

### Honors

To receive honors in music, students must attain a minimum GPA of 3.5 in the major and submit for consideration a substantial senior-year project, which may include study in composition, performance, literature and/or analysis.

### Minor Requirements

Students wishing to minor in music must complete the following requirements:

- MUS 200 or 201.
- MUS 210.
- MUS 220.
- At least two other full-unit courses in music, one of which must be a 300-level course.
- At least two semesters of participation in a music department ensemble.

## Advanced Standing

Students with a background in music (including fluent reading of at least one clef) may register for MUS 200 or 201 (Music Theory). Students without extensive prior experience in music should begin their coursework with MUS 100 or 101 (Introduction to Music).

## Individual Lessons

St. Lawrence students may elect to take individual lessons in voice or on an instrument, space permitting, for a fee of \$400 per semester. Full-time SLU students registered for department ensembles may take lessons for the reduced fee of \$200 per semester. Full-time students enrolled in MUS 101 (Introduction to Music), MUS 201 (Music Theory), or MUS 260 (Rehearsing) will receive lessons at no additional cost. Students claiming this exemption will be graded on lesson participation as a portion of the course grade. Go to <https://www.stlawu.edu/offices/music> for further information on lessons.

## Ensembles

Students audition for ensembles at the beginning of each semester instead of registering for ensembles during the normal registration period. Go to <https://www.stlawu.edu/offices/music> for information on auditions. Normally, students receive 0.25 unit of credit for taking an ensemble.

### 021. Laurentian Singers.

A select undergraduate vocal ensemble that performs both on and off campus through the year. Their far-ranging repertoire is drawn from traditional choral sources as well as world and popular idioms. The Laurentian Singers tour each Spring Break.

### 022. University Chorus.

A choir open to the entire University community. The ensemble performs major works from the choral and choral-orchestral repertoire from the 16th through the 20th centuries.

### 025. String Orchestra.

An ensemble that performs repertoire from the 17th century through the present. Recent concerts have included works by Antonio Vivaldi, Wolfgang Amadeus Mozart, Franz Schubert and Henry Cowell.

### 026. Wind Ensemble.

This ensemble explores a range of music covering over 200 years of repertoire in a variety of styles, and is open to wind, brass and percussion players.

**027. Rhythm and Roots Ensemble.**

This ensemble takes a particular strand of vernacular music as its focus each semester, and is open to guitarists, percussionists, pianists, vocalists, and woodwind and brass players. Recent topics of study include Hawaiian music, the music of Motown, and New Orleans rhythm and blues.

**028. Improvisation Lab.**

This ensemble provides opportunities for students to develop their interests and skills in a variety of American popular musics. Students research recordings outside of class and use them as the basis for further study in class. Rehearsals emphasize playing by ear in conjunction with using varying degrees of written notation.

**029. SoundSandBox.**

Do you catch yourself drumming incessantly on tabletops, singing along with the washing machine's beat, or making saxophones out of pizza boxes and broken straws? The SoundSandBox is for you, a place to explore ways of making sound together. Skilled musicians are welcome, but all students may audition for this ensemble. Recent projects include collaborating with NYC-based percussionist Susie Ibarra and accompanying a silent film on Halloween.

**032. Funk Ensemble.**

Dubbed SLUFunk by its members, the Funk Ensemble primarily performs American R&B, soul, and funk music, but has also explored styles ranging from Afro-Cuban jazz to Nigerian Afro-beat to contemporary hip-hop. The ensemble both plays the music and seeks to understand its historical context and significance. SLUFunk is modeled on a working band: participants make decisions about membership, repertoire, and gigs, and are expected to take on the work of the band from writing arrangements to designing posters to lugging gear.

## Courses

**100/101. Introduction to Music.**

An introduction to the study of music, this course includes development of listening skills as well as an overview of the basic materials and techniques of musical organization. The music is chosen from a wide range of times and places. Students use the resources of the music library and the Newell Center for Arts Technology for listening, research and composition. As a complement to class work, students attend concerts and recitals on and sometimes off campus. Students may include individual lessons in voice or on an instrument as part of this course. Open to students with little or no prior study of music. Offered every semester.

**200/201. Music Theory.**

This course is meant to develop abilities in listening to, analyzing, performing and creating music. We engage in different kinds of musical activities: studying the sight and sound of music, playing and singing snippets of music, composing short pieces. Throughout, the intent is to provide critical skills for

deepening the understanding of music. Students may include individual lessons in voice or on an instrument as part of this course. Offered every semester.

#### 210. Musics of the World.

This course explores selected musics from Asia, the Pacific, Africa, Europe and the Americas, by means of recordings, films, readings, concerts and hands-on experience. Broad topics for investigation include the development of popular musical styles, the preservation of traditional musical styles and the circulation of indigenous sounds in the world music market. Offered every semester. *Also offered, at the discretion of the instructor, through African Studies, Global Studies and Peace Studies, and/or as ASIA 210.*

#### 220. Music and Technology.

An in-depth look at the practical and artistic issues involved in making music with computers. This includes a study of some fundamental concepts and a practical application of these concepts using the resources of the Newell Center for Arts Technology. The course is divided into two broad sections — (1) the MIDI protocol: what it is, how it works and what you can do with it; (2) digital audio: a brief introduction to acoustics, a study of how audio is recorded and played back digitally and a consideration of the uses of digital signal processing. Offered every semester. Prerequisite: MUS 100/101, 200/201, or permission of the instructor.

#### 222. Sound for the Stage.

This course explores some of the artistic and practical aspects of using sound in support of theatrical production. The course employs concepts of design drawn from the theater and applies those concepts to the choice of music and sound effects for the stage. We explore the potential of sound and music for the reinforcement of dramatic content and production design concepts, and introduce the production organization common to most theater productions: the collaborative design process and the team approach to production assignments. Offered every year. *Also offered as PCA 202.*

#### 227. Recording Arts.

Recordings of audio materials are a growing part of our world, and making professional recordings is an art that is now within the reach of many. The technology of recording is a combination of listening and performance skills and electronics. Designed to hone skills in producing recorded materials, this course is a practical survey of materials and methods, with core principles applied to projects that will provide an understanding of how to achieve quality recordings by intelligent use of available equipment and spaces. Offered occasionally.

#### 229. Popular Music Industries Since the 1890s.

In this course, we will examine important historical moments and strategic developments that have shaped the popular music industries since the late nineteenth century. We will cover topics such as the major innovations of Tin Pan Alley that gave birth to popular music, musical labor and copyright, and the relationships between ever-changing technology and models for profiting from music. Offered every

year.

236. Music and Race.

In this course, we will explore how music and ideas about race have become intertwined in the U.S. We will examine the historical constructions of music as a phenomenon with racial qualities and investigate the broader context behind contemporary debates and controversies concerning race and music. Offered every year. *Also offered as AFAM 236.*

244. Musics of South Asia.

South Asia is the subcontinent that lies south of the Himalayas and includes India, Nepal, Bangladesh, Pakistan, Afghanistan and Sri Lanka. There are also substantial South Asian populations elsewhere. Topics for study include devotional song, Bollywood film music, urban Nepali drumming, and electronic music in New York and London. The course begins with a grounding in the classical music traditions of India, moves on to explore selected musical practices around South Asia, and finishes with a consideration of music's place in the South Asian diaspora. Offered occasionally. *Also offered as ASIA 244.*

245. Musics of Eastern Europe.

In this course, we examine and analyze the music of a region where social and political life has changed dramatically and frequently during the last 150 years. From the revolutions of 1848 to the post-communist struggles of the 1990s, music and musicians often have been drawn into debates about national and regional identities. We proceed from the assumption that notions of identity and difference are evident not only in discourse about musical practices, but also in musical sound itself. Offered occasionally. Prerequisite: MUS 100/101, 200/201. *Also offered through European Studies and Peace Studies.*

246. Transpacific Musics.

In this course, we will turn to music to explore the transpacific world and its significance to the histories of the U.S. and various Asian nations. Three broad sections focus on the influence of Asian and Pacific Ocean music in the U.S., the circulation of music from Hawai'i and other Pacific Islands, and the spread of U.S. music in Asia. Offered occasionally. *Also offered as ASIA 246.*

260. Rehearsing.

Satisfying performances come out of both understanding one's music thoroughly and rehearsing it efficiently. A weekly, individual lesson focuses on the skills appropriate to your instrument or voice. Class meetings concentrate on (1) reading rhythms and shaping musical phrases; (2) arranging and orchestrating music; and (3) organizing and leading practice sessions and rehearsals. Offered occasionally. Prerequisite: MUS 100/101 or MUS 200/201. May be repeated for credit.

270. Collaboration Across the Arts.

The direction of this course is determined largely by the unique combination of students who participate. Students form groups of two or three to work on a collaborative project of their own design reflecting their collective interests. For example, a pair of students may create a multimedia work that draws connections between image and sound. Students critique works in progress, study exemplary works, discuss relevant aesthetic issues, trace connections across media and consider strategies for collaborative work. Offered every year. Prerequisite: permission of the instructor. *Also offered as AAH 270 and PCA 270.*

281. Music Video.

Music television created new ways of visualizing music, new ways of seeing sound. This course looks at the rise of music video in the 1980s, its predecessors and its influences. While the focus is primarily on the history and criticism of music video, the course also contains a substantial production component that includes creating and editing sound and video files. Offered occasionally. *Also offered as FILM 281.*

The content of each course or section of these 300-level or 400-level special topics courses varies and will be announced each semester.

300. Musical Structures.

This course is for students who have completed MUS 200 or 201 and wish to continue their study of music analysis. It focuses on the study of musical events such as harmony, melody, rhythm, texture and form in order to develop skills in understanding, analyzing, composing and listening to music. We study harmonic, melodic, rhythmic, textural and formal choices various composers have made and the ways those choices affect how music is perceived. Offered every year. Prerequisite: MUS 200/201.

325. Computer Music Programming.

While the world of computer-generated music includes a wide array of genres, it also incorporates a wide variety of tools. In this course, students will learn to synthesize and process sound with software tools that make few assumptions about what electronic music should be. Class topics will include listening and analysis, techniques for synthesis and signal processing, and composing/performing with MaxMSP and, if time permits, Csound. No prior programming experience is required. Offered occasionally. Prerequisite: MUS 220.

337. Avant-garde and Underground Music.

This course covers music that has been considered experimental, radical or transgressive in classical music, jazz and rock. Through surveying European and American perspectives on the relations between the arts and society in the 19th and 20th centuries, we work toward understanding the ideologies that have motivated musicians to locate their styles and practices outside of an imagined mainstream. In studying influential musical works from the last two centuries, we seek to clarify how musicians have put their ideologies into musical practice. Offered occasionally. Prerequisite: MUS 200/201. *Also offered through Peace Studies.*

### 350. Composition.

The fundamental activity in this course is observation. Having arrived at a formative idea for a composition by means of a close analysis of a generative source, we begin describing that idea by any of several means (for example, a score, a performance or a sound generator), and making sense of that idea in sound. At the discretion of the instructor, students work with acoustic instruments, digital music technology, or both. Offered occasionally. Prerequisites: MUS 200/201 and MUS 220. May be repeated for credit when course content varies.

### 470, 471. Advanced Projects in Music.

Independent research in an area of musical study under the guidance of a member of the music faculty. Students must submit a written proposal to the department chair no later than November 15 for projects to be undertaken in the spring semester or April 15 for projects for the following fall. Prerequisites: MUS 200/201, MUS 210, and at least one other course in music.

### 489, 490. SYE: Independent Study.

Senior-year projects are intended to be the product of several semesters of study, bringing together more than one area of musical endeavor. Students must submit a written proposal to the department chair no later than November 15 for projects to be undertaken in the spring semester or April 15 for projects for the following fall. Prerequisites: MUS 200/201, MUS 210 and at least one other course in music.

## Native American Studies

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Minor offered.

Visit the Native American studies webpage by linking directly to it from the Majors, Minors and Programs page at <https://www.stlawu.edu/offices/native-american-studies>.

### Minor Requirements

The Native American studies minor consists of six courses. Students must complete two “foundation” courses:

#### History

229. Introduction to Native American History.

#### Performance and Communication Arts

322. Native American Oral Traditions. *or*

330. Ritual Studies. (with permission of the instructor)

#### Sociology

228. Race and Ethnicity

Students must also complete a 300 or 400-level course **or** an approved project as a Senior-Year Experience. Three other courses must be selected from the courses cross-listed with the Native American studies program. Students are advised to contact the program coordinator for the most current information on course offerings and program requirements.

## **Courses**

Students should check each semester under both Native American studies and the relevant departments for course offerings.

### **Departmental Offerings**

#### **Anthropology**

- 104. Language and Human Experience
- 255. Environmental Perception and Indigenous Knowledge.

#### **Biology**

- 121. The Natural World.
- 258. Ethnobotany.

#### **Canadian Studies**

- 3000. Indigenous Peoples of Canada
- Caribbean and Latin American Studies
- 103. Introduction to Ethnic Studies and Social Justice
- 105. Introduction to Latino Studies

#### **Education**

- 353. American Philosophies of Education
- 4009. Feminist Learning Theories

#### **English**

- 231. Adirondack Literature.
- 237. LS: American Literature I
- 263. LS: Contemporary Indigenous Poetry

#### **Environmental Studies**

- 187. Environment and Society.
- 253. Race, Class and Environmental Justice.
- 302. Air Pollution.
- 303. Land Use Change in the Adirondacks.
- 329. Adapting to Climate Change.

**First-Year Program**

1021. Identity and Belonging in the St. Lawrence Valley

**Global Studies**

102. Introduction to Global Studies II: Race, Culture, Identity.

260. Transnational Migration.

264. Global Public Health: Critical Approaches

302. Theories of Cultural Studies.

**History**

203. Early Canada

204. Modern Canada

229. Introduction to Native American History.

333. The Age of the American Revolution.

352. Playing Indian: Native American Stereotypes in American History and Imagination.

**Performance and Communication Arts**

322. Native American Oral Traditions.

**Philosophy**

353. American Philosophies of Education

4017. Feminist Learning Theories

**Sociology**

228 Race and Ethnicity.

**Spanish**

221. Latin America in Film

3036. Gender and Race in Latin America

3037. Indigenous Peoples in Latin America

3039. LGBTQ in Latin America and AbiyalaIn conjunction with the Native American Student Organization, the program sponsors films, guest speakers and social events throughout the academic year.

# Neuroscience

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Major offered.

More information on this interdisciplinary major can be found at <https://www.stlawu.edu/offices/neuroscience>.

Students may elect a cellular track or a behavioral track as described below. It is imperative that first-year students seek early advisement from a biology or psychology faculty member; they should also begin the introductory courses in each department during the first year. Occasionally, special topics courses in biology, neuroscience and psychology not listed in the *Catalog* may count toward this major. Students may also apply to have one abroad course count as an elective. Note that students majoring in neuroscience may also not major or minor in either biology, psychology, biochemistry or biomedical sciences. Also, for those who intend to pursue graduate study in neuroscience, a year of physics (PHYS 103-104 or 151-152) and the second semester of organic chemistry (CHEM 222) are highly recommended.

## Major Requirements

### Core Courses (required by both tracks)

#### Biology

101,102. General Biology. (2.5 units) - Students must earn at least a 2.0 in each semester of General Biology.

#### Chemistry

103, 104. General Chemistry. (2.5 units)

221. Organic Chemistry. (1.25 units)

#### Statistics

113. Applied Statistics. (1 unit)

#### Neuroscience

288. Introduction to Neuroscience. (1.25 units)

389. Advanced Neuroscience. (1 unit)

#### Psychology

101NL or 101WL. Introductory Psychology. (*without or with lab*) (1 unit)

**Total:** 10.25 units

### Cellular Neuroscience Track

#### Biology

One of the following: (1.25 unit)

250. Research Methods in Cell Biology (*with lab*)

392. Research Methods in Fluorescence and Confocal Microscopy (*with lab*)

394. Research Methods in Biochemistry. (with lab)

395. Research Methods in Molecular Biology (*with lab*)

Plus four additional courses from the following list. At least two must have a laboratory and at least two must be neuroscience courses.: (4.5 units)

### **Neuroscience**

233. Neuroscience of Fear.

387. Cellular Mechanisms of Memory

388. Drugs and the Brain (*with lab*)

399. Current Topics in Neuroscience.

489/490. Senior-Year Experience (SYE) (1 unit)

### **Biology**

245. Genetics.

252. Research Methods in Cell Biology (*with lab*)\*

309. Biochemistry.

333. Immunology (*with lab*)

341. Anatomy and Physiology I (*with lab*)

351. Anatomy and Physiology II (*with lab*)

392. Research Methods in Fluorescence and Confocal Microscopy (*with lab*)\*

394. Research Methods in Biochemistry. (with lab)\*

395. Research Methods in Molecular Biology (*with lab*)\*

*\*if not taken to satisfy the research methods requirement*

### **Behavioral Neuroscience Track**

#### **Psychology**

205. Research Methods in Psychology. (1 unit)

Plus four additional courses from the following list. At least two must have a laboratory and at least two must be neuroscience courses:

#### **Neuroscience**

233. Neuroscience of Fear.

388. Drugs and the Brain (*with lab*)

399. Current Topics in Neuroscience.

438. Human Neuropsychology.

489/490. Senior-Year Experience (SYE) (1 unit)

## Psychology

- 326. Hormones and Behavior (*with or without lab*).
- 327. Sensation and Perception (*with or without lab*)
- 401. Learning and Behavior (*with lab*)
- 402. Memory and Cognition (*with or without lab*)
- 432. Animal Behavior (*with lab*)
- 459. Cognitive Science.

## Advanced Standing

Students scoring a 4 or 5 on the AP biology exam or a 5, 6 or 7 on the IB exam should enroll in the first semester of Biology 101 (General Biology) for which they will receive the normal 1.25 units of credit toward the neuroscience major. Students who do well in 101 may be permitted to bypass the second semester of General Biology course (BIOL 102), receiving the 1.25 units of credit for this course as well as the right to take courses that require BIOL 102. Approval of this option to bypass the BIOL 102 course is determined by the General Biology course instructors. Although AP or IB scores noted above automatically nominate students for this bypass option, students may voluntarily choose to stay in the General Biology course-sequence and enroll in BIOL 102.

Students who have taken Advanced Placement psychology and received a grade of 4 or 5 on the advanced test are eligible to receive 1 unit of credit for PSYC 101NL (without lab). Academic planning forms are available on the neuroscience web page.

## Courses

- 233. Neuroscience of Fear.

Brain structures that control the fear response are shared across humans, mammals, birds, and reptiles. These structures have been evolutionally preserved because fear helps to protect us from danger, injury, and death. Though the dangers of modern society differ substantially from those of our ancient past, aspects of our primal fear instincts remain. Are such emotions merely intrusions from another time or do they still have a function in our consciousness today? With a focus on the fear response, we will examine the evolutionary foundations of emotions, how they are displayed, develop over time, and tie into decision-making in our everyday lives. We will examine this issue from a multidisciplinary perspective, synthesizing recent work from the fields of biology, psychology, neuroscience, and philosophy. Offered abroad in the summer term. Prerequisites: BIOL 102 or PSYC 101. Also offered as BIOL 233, PSYCH 233.

- 288. Introduction to Neuroscience. (*with lab*) (1.25 units)

This course provides basic understanding of the architecture and processing of information in the brain. Particular emphasis is placed on the cellular properties of cells in the nervous system and how these biophysical properties affect information processing. To this end, students learn neuroanatomy and use computer models to gain insight into the computational power of the brain. Other topics include development of the nervous system, neurophysiology of sensation and homeostatic control

mechanisms. Three hours of lecture and three hours of laboratory per week. Offered every fall semester. Prerequisites: BIOL 101,102. Recommended: BIOL 245, 246 or 250. *Also offered as BIOL 288.*

387. Cellular Mechanisms of Memory.

This course examines the molecular mechanisms of neuronal plasticity. Topics include an analysis of the cellular processes that have been proposed to be at the core of memory formation, with discussion of the electrophysiological methods that have been used to analyze these processes; the biochemical mechanisms for short-term and long-term information storage at the cellular level and the vertebrate and invertebrate experimental models used for studying the molecules involved in memory formation. Prerequisites BIOL/NRSCI 288. Counts toward the neuroscience major (cellular track). Offered in alternate fall semesters. *Also offered as BIOL 387.*

388. Drugs and the Brain. *(with lab) (1.25 units)*

This course will focus on how psychoactive drugs modify nervous system function and human behavior. The neurochemical and behavioral techniques used to study drug action will be addressed. Students will learn how drugs are metabolized by the body (pharmacokinetics), act (pharmacodynamics) and affect behavior (psychopharmacology), gaining comprehensive understanding of the neurotransmitter systems of the brain and how different drugs affect these systems. The laboratory component will utilize the nematode *C. elegans* as a model system to explore drug action; students will learn research techniques and carry out independent research. Three hours of lecture and three hours of laboratory per week. Prerequisites: BIOL/NRSCI 288 or BIOL 351. Counts toward the neuroscience major (both tracks). Offered every spring semester. *Also offered as BIOL 388.*

389. Advanced Neuroscience.

Builds on the fundamental concepts presented in 288 (Introduction to Neuroscience) and begins to examine neurobiology from a systems perspective. Topics include the neurobiology of food intake, sleep and dreaming, epilepsy and seizures, Alzheimer's disease, disorders of thought and volition, and mood disorders. Prerequisite: BIOL/NRSCI 288. Required for the neuroscience major. Offered every spring semester. *Also offered as BIOL 389.*

399. Current Topics in Neuroscience.

This seminar course will cover a wide variety of topics related to current neuroscience research. Our main source of information will be neuroscience primary literature articles available in the public domain. Students enrolled in the course will decide on the topics that will be addressed throughout the semester, will read the primary literature and will lead critical and comprehensive discussions on each research topic. Examples of topics that can be covered in this course include: epigenetics; mirror neurons; autism spectrum disorders; neurobiology of mental disorders; learning and memory; drug abuse and addiction; and the aging brain. Prerequisites: BIOL/NRSCI 288 or BIOL 351. Counts toward the Neuroscience Major (both tracks). Offered in alternate fall semesters. *Also offered as BIOL 399.*

#### 438. Human Neuropsychology.

This seminar course will examine the function of the human nervous system as it relates to cognition and behavior. Topics covered will include: language, attention, memory, motor skills, visual-spatial processing, problem solving, emotion, and consciousness. Special attention will be paid to the modern methodologies used to study brain-behavior interactions in normal and neuropsychological populations. Lectures, discussions and projects will make use of both empirical and clinical case materials. Prerequisites: BIOL/NRSCI 288. Counts toward the Neuroscience major (behavioral track). Offered in alternate fall semesters. *Also offered as PSYC 438.*

#### 489,490. SYE: Senior Project.

Senior research may be conducted with a willing faculty mentor and may be of one semester duration (NRSCI 489, SYE research for 1 unit) or for the entire senior year (NRSCI 489, 490, SYE research for 1, 1.5, or 2 units). Expectations vary, contingent upon the units desired. The project should integrate acquired research skills and/or subject knowledge gained through the major and culminate in an appropriate written format and an oral presentation. Presentation at the St. Lawrence Festival of Science is encouraged.

#### 499. SYE: Honors Research.

Students integrate acquired research skills and subject knowledge gained through the major to collect original experimental data and analyze the results in reference to the existing scientific primary literature. Results will be presented orally to the neuroscience faculty and/or at the annual Festival of Science and be written as an honors thesis, to be bound and archived in both departments and in the science library. Graduation in neuroscience with the designation of honors requires exceptional academic accomplishment as demonstrated by a major GPA equal to or above a 3.5, and completion of a second semester of SYE honors research according to established guidelines. To graduate with honors in neuroscience, students normally take NRSCI 489 in the fall semester and then enroll in NRSCI 499 for the spring semester. In addition, students must: 1) have a neuroscience GPA of 3.5, 2) form a mentoring committee, 3) complete an honors nomination form by the end of the fall semester, 4) submit a written thesis to the committee by the last day of spring classes, 5) present the work at the St. Lawrence Festival of Science.

## Outdoor Studies

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Minor offered.

Visit the outdoor studies webpage at <https://www.stlawu.edu/offices/outdoor-studies>.

### Minor Requirements

To complete a minor in outdoor studies, students may choose between the on-campus track or the Adirondack Semester intensive off-campus track. Either track requires a minimum of 5.5 units. Both tracks require the acquisition of certain fundamental outdoor skills.

## **On-Campus Track**

Students must take courses from three categories of courses: Outdoor Education, Science w/field lab and the Philosophy/Environmental Studies/Art categories.

1. ODST 100 *or* ODST 251.
2. One additional 0.5-1.0 credit course from the Outdoor Education category.
3. Two courses from the Philosophy /Environmental Studies/Art category, preferably from different disciplines
4. One course from the sciences with field lab category.
5. One additional 1.0 credit course form any category or a relevant FYP or FYS course.

\*Courses in these-required categories include but are not limited to the list below; refer questions to the director.

### **Outdoor Education**

- 100. Principles of Outdoor Leadership.
- 101. Modern Outdoor Recreation Ethics (“MORE”). (0.5 units)
- 115. Introduction to Snow Science and Avalanches.
- 251. Advanced Topics: Outdoor Leadership.

### **Science with Field Lab**

#### **Biology**

- 121. The Natural World.
- 209. Vertebrate Natural History.
- 215. Invertebrate Biology.
- 218. Ornithology.
- 221. General Ecology.\*
- 227. Mammalogy.
- 224. Biology of Plants.
- 258. Ethnobotany.
- 325. Mycology.
- 330. Ecology of Lakes and Rivers.
- 335. Winter Ecology.
- 360. Marine Ecology.
- 380. Tropical Ecology.\* Medicinal Plant Ecology
- 440. Conservation Biology.

#### **Geology**

- 103. The Dynamic Earth.
- 211. Geomorphology.

- 216. Sedimentology.
- 320. Regional Field Studies.
- 350. Structural Geology.
- 3019. Adirondack Natural History & Environment.

**Physics**

- 101/102. Introduction to Astronomy.

**English**

- 231. Adirondack Literature.
- 243. Creative Non-Fiction Writing.+
- 282. Going Locavore\*
- 293. Literary Harvest\*
- 295. Nature and Environmental Writing\*
- 308. Advanced Creative Non-Fiction Writing.+
- 328. English Romanticism.
- 334. Reading the Land: Pastoral and Georgic Literature\*
- 346. American Literature and the Environment.\*
- 352. Contemporary Literature and the Environment.\*

**Environmental Studies**

- 235. Foundations of Environmental Thought
- 249. Outdoor Recreation and Public Land.
- 263. Global Change and Sustainability.
- 326. Once and Future Forests.
- 333. Climate Change Politics and Advocacy
- 343. Ecology and Political Thought.
- 371. Landscape Ecology.

**Philosophy**

- 310. Philosophy of the Environment.

**Religious Studies**

- 103. Religion & Ecology.

**Sociology**

- 187. Environment and Society \*

**Art**

- 256. Art and Nature.

\*Dual-listed with Environmental Studies.

+Only sections including experiences in nature satisfy this requirement.

### **Intensive Off-Campus Track**

1. Four and a half units taken during the Adirondack Semester.
2. One 1 unit elective from the Outdoor Education (other than ODST 111), Field Science or Philosophy/Literature/Environmental Studies/Arts categories, or a relevant FYP or FYS

## **Courses**

### 100. Principles of Outdoor Leadership.

An introduction to outdoor studies that includes many elements of the minor. The course integrates lecture and field experiences that explore the basic theories, concepts and skills in the field of outdoor leadership and education. It also examines personal outdoor recreational ethics as well as knowledge about environmentally sensitive recreation in the outdoors.

### 101. Modern Outdoor Recreation Ethics. (.5 units)

By means of study, experience and reflection, this half-unit lecture and required lab course attempts to foster a personal environmental ethic as well as knowledge about environmentally sensitive recreation in the outdoors. Course content focuses on historical and present-day philosophies and practices of outdoor pursuits, including backcountry travel, canoeing, climbing, first aid and expedition planning. The course requires five overnight field trips to practice the material covered in the classroom.

### 115. Introduction to Snow Science and Avalanches.

This eight-day January course integrates theory with scientific technical skills on a unique field-expedition in a mountain range in North America. Students learn the foundation principles of snow science and avalanche study through readings, classroom learning and field experience, and explore the relationship between human behavior and decision-making, and how it affects snow pack stability. Topics include snow science, mountain weather, geology, avalanche search and rescue, backcountry travel, and the human-nature interaction and relationship in a mountainous winter environment, as well as backcountry wilderness skills necessary to recreate, travel and study safely in a mountainous winter environment.

### 201. Natural History and Ecology of the Adirondacks. (Adirondack Semester)

This field-oriented course emphasizes the natural history, ecology, geology, geography and climate of the Adirondacks. Primary emphasis is on the ecology, life history, local adaptations and uses of Adirondack flora and fauna. Basic ecological concepts such as ecosystem function, community diversity, food web structure, seasonal change, competition, and nutrient cycles are studied by means of field trips and field studies. Studies examine the influence of weather, day length, and geology and may include the movement of stars and planets. Students learn how to record observational data and how to conduct an experiment.

202. Creative Expressions of Nature. (Adirondack Semester)

Many good stories have their roots in the Adirondacks. From Indigenous peoples' oral histories to outdoor enthusiasts' excursion narratives, from the logging industry's folk ballads to tall tales about hunting and fishing, in historical fiction and poetry, in literary journals and environmental magazines, residents and visitors alike have shared their Adirondack experiences in both speech and print, mapping in the process a cultural geography as rich and varied as the region's natural terrain. This course will survey the field of contemporary Adirondack writing from the past fifty years, with a particular focus on recent work. We will read a variety of regional writing in the genres of journalism, poetry, and creative nonfiction, and in turn, students will report on—and reflect on—their own Adirondack experiences. Writing assignments will be project-based and public-facing. Students will produce weekly content for the Adirondack Semester website, and they will collaborate to design and print a small magazine featuring their own creative work.

203. Land Use Change in the Adirondacks. (Adirondack Semester)

Using the Adirondacks as a case study, this course examines current activities in land planning and the importance of historical context. Study of Adirondack history begins with 16th-century information from European explorers and Native Americans. Emphasis is then placed on industrial and recreational use in the 19th century. The course highlights formation of the State Forest Preserve and the Adirondack Park, and regulations governing private land use. Study of the present utilizes political theory such as internal colonization and core periphery. The course employs local examples through discussion and field trips.

251. Advanced Topics of Outdoor Leadership and Education.

This intensive, field-based course culminates with a two-week expedition in which students apply the leadership and teaching skills learned through lectures and labs during the semester. This is a student-designed and instructor-facilitated experience, in which students develop risk management plans, course itineraries and outdoor education lesson plans specific to a wilderness expedition, and assume direct leadership roles implementing their developed lesson plans. The course is designed for students who will work as outdoor guides and educators in the St. Lawrence University Outdoor Program and other professional organizations.

277. Knowing Nature. (Adirondack Semester)

This class examines a variety of methods and techniques by which humans co-create knowledge within the context of their environment. Course activities will engage the various examples of how cultures across geographic and temporal space have valued nature. Students will practice and critically examine the ways that individuals and communities interact with the natural world and ask how perception impacts how humans relate to and engage with eco-social systems. The class will explore the concept of nature as knowing and intelligent through the lenses of recent scientific research and traditional knowledge.

## Peace Studies

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Minor offered.

Visit the Peace studies webpage at <https://www.stlawu.edu/offices/peace-studies>.

### Minor Requirements

A minor in Peace Studies consists of at least five courses, including PEAC 100; three or more courses cross-listed from other academic departments and programs; and either PEAC 400 or PEAC 489. From time to time the program also offers special topics courses that also count towards the minor.

Students must complete the cross-listed courses after taking 100 and before taking 400 or 489. In rare cases, and with the approval of the program coordinator, a student may take one cross-listed course concurrently with 100 if the student is already clear that he or she intends to minor in Peace Studies and consults with the program coordinator and instructor of 100 early in the semester. It is strongly advised that students who want to minor in Peace Studies should declare their minor in their sophomore or junior year to allow for comprehensive planning of the minor and the senior capstone experience. Also in rare cases, and with the approval of the program coordinator, a student may take his or her cross-listed courses concurrently with 400 or 489. In general, however, students take the three cross-listed courses between the introductory course and the capstone course.

No more than one of these cross-listed courses should be a course that counts for the student's major(s) (or other minor, if relevant). Students who intend to minor in Peace Studies should meet with the program coordinator to plan a set of cross-listed courses that complements their interests in a meaningful way. Some students may focus on a particular peace studies angle: international issues with a focus on a particular conflict, for example. Others may wish for a more broad-based background, choosing an array of courses that helps them gain a wider and interdisciplinary perspective on peace issues.

Students who minor in Peace Studies must keep portfolios of their work in all courses intended for their minor, and are expected to keep in regular touch with the program coordinator about their progress through the minor.

### Courses

100. Introduction to Peace Studies.

The purpose of peace studies is to explore the potential for nonviolent methods of building social, political and economic justice. This course intentionally searches for alternative ways of understanding conflict. We will ask questions such as: Can we define "peace" in more positive terms than the unrealistic "absence of conflict"? Can conflict be positive or even transformative? Are "peacemakers" different from the rest of us? Can we all learn to live harmoniously with others who are very different from us? And what are ways to cultivate the inner peace that gives people the strength and insight to deal with conflict creatively and positively? Also offered as PHIL 120.

102. A Historical Approach to Peace Studies.

Are humans inherently violent? Is war "natural"? Is it inevitable? How do people in different societies respond to conflict? Is it possible or even desirable to eliminate all conflict in human interactions? What is meant by "peace"—is it simply the absence of violence? What is necessary for establishing and maintaining a peaceful community or society? How are animals and the environment relevant to peace for humans? Does inner peace relate to outer peace? To answer these questions, we will study historical and recent examples of nonviolent social and political actions and movements, as well as approaches recommended by contemporary scholars and practitioners for transforming conflicts at the interpersonal to international levels and fostering peace. We also will consider how moral doctrines have envisioned alternatives to violence. Additionally, we'll examine and engage in mindfulness, meditative, and other contemplative exercises as means to explore the relationship between inner and outer peace. Fulfills HU requirement. *Also offered as HIST 107.*

3000-3999.

The content of each course or section of these 100-level or 200-level special topics courses varies and will be announced each semester.

4000-4999.

The content of each course or section of these 300-level or 400-level special topics courses varies and will be announced each semester.

380. Philosophy of Peace.

In this course we explore the meanings of terms such as peace, justice, conflict, violence, pacifism, conscientious objection, and civil disobedience, and we will consider the relationships among these terms. We will also consider questions such as: Is it possible to create a truly just world? Is it possible to respond to serious conflict or oppression nonviolently? Is the use of violent force ever justified? Is a "just war" possible? We will read classic works by philosophers and others on these topics. We will also reflect on our own identities, how power is constructed in our world, and will conclude the course by envisioning a better world and considering how to work towards creating it. Pre-requisite: PEAC 100 or any 100-level philosophy course or permission of the instructor. Also listed as PHIL 380.

400. SYE: Peace Studies Capstone Seminar.

This course is intended to provide an opportunity for peace studies minors to integrate what they have learned in all of the courses that they have taken for their minor. Students re-examine what they learned in these courses, making connections to important peace studies concepts; they also design integrative projects that draw from and extend those studies, and share their work with each other throughout the course. Prerequisite: PEAC 100. Limited to Peace Studies minors.

489. SYE: Peace Studies Capstone Independent Study.

If a student must take the capstone seminar in a semester during which it is not offered, he or she may take the course as an independent study under supervision of a faculty member.

## Departmental Offerings

For the current listing of course cross-listed with Peace Studies, please see <https://www.stlawu.edu/peace-studies>.

# Performance and Communication Arts

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Major and minor offered.

Visit the performance and communication arts webpage at <https://www.stlawu.edu/offices/performance-and-communication-arts>.

## Major Requirements

Most students who major in the department begin with an interest in one of the two broad areas of inquiry— rhetoric/communication studies or theatre/performance studies. Majors choose a primary area of concentration. Eleven units are required to complete the major. Fulfillment of the major requires the following:

All majors take the following four survey courses that will introduce them to various aspects of the major:

- 107. Beginning Acting.
- 111. Rhetoric and Public Speaking.
- 125. Introduction to Theatre.
- 127. Introduction to Communication Studies.

Majors must complete seven additional courses, at least five of which must be in their primary area of concentration. At least four of these courses must be at 300-level and above. At least two must be designated as a research intensive (RI) course.

### **Courses in rhetoric/communication studies include:**

- 105. Language as Human Experience. *(Dual-listed by ANTH)*
- 201. Introduction to Journalism. *(Dual-listed by ENG)*
- 225. Peer Mentoring in Rhetoric and Communication.
- 239. Media Industries.
- 3000-3999. Special Topics in Rhetoric/Communication Studies. *(200-Level Courses)*
- 310. Culture & Media.
- 311. Advanced Public Speaking.
- 315. Gender and Communication.

- 316. Advanced Communication Studies.
- 318. Argumentation and Debate.
- 321. Intercultural Communication.
- 326. American Public Address.
- 328. Interpersonal Communication.
- 329. Rhetoric of Social Movements.
- 331. Presidential Campaign Rhetoric.
- 333. Rhetorical Criticism.
- 334. Environmental Communication.
- 335. Sex Talk.
- 336. Rhetoric and Citizenship.
- 342. Blogging the Globe: News Analysis and Investigative Journalism. *(Dual-listed by GS)*
- 360. Public Sphere of Renaissance Venice.
- 361. London Coffeehouse Culture & Modernity.
- 365. Rhetoric of Algorithms (cross-listed with Digital Media & Film)
- 370. Against Health: Rhetoric & the Health Humanities.
- 4000-4999. Special Topics in Rhetoric/Communication Studies. *(300-Level Courses)*
- 480. Independent Study.
- 489. SYE: Senior Project.
- 498. SYE: Honors Senior Project.

**Courses in theatre/performance studies include:**

- 100. Beginning Ballet.
- 101. Production Credit.
- 103. Stagecraft. (dual-listed with DMF)
- 106. Performing Diversity.
- 107. Beginning Acting (dual-listed with DMF)
- 113. Introduction to Performance Studies.
- 202. Sound for the Stage.
- 215. Dramatic Texts in Context.
- 223. Playwriting.
- 230. Beginning/Intermediate Modern Dance.
- 235. Beginning/Intermediate Jazz Dance.
- 237. Contemporary British Theatre – Intro Level. *(offered off campus in London)*

- 244. Techniques of Screenwriting.
- 255. African American Drama.
- 270. Collaboration Across the Arts.
- 3000-3999. Special Topics in Theatre/Performance Studies. *(200-Level Courses)*
- 301. Advanced Modern Dance.
- 303. Stage Lighting.
- 304. Arts Management. (offered off campus in New York City)
- 305. Make-up Design
- 306. Advanced Screenwriting.
- 307. Characterization. (cross-listed with DMF)
- 308. Cultural Encounters. (offered off campus in New York City)
- 309. Acting Styles.
- 314. Devising for Performance.
- 317. Performing Poetry.
- 319, 320. Shakespeare.
- 322. Native American Oral Traditions.
- 327. Drama By and About Women. (cross-listed with GNDR)
- 330. Ritual Studies.
- 332. Directing. (dual-listed with DMF)
- 337. Contemporary British Theatre – Advanced Level. *(offered off campus in London)*
- 338. Twentieth-Century Avant-Garde.
- 340. Performance Art.
- 343. Taboo Performances.
- 344. Children’s Theatre in the Schools.
- 355. Studies in World Dramatic Literature.
- 358. Madrid Stage. (offered off campus in Madrid)
- 362. Introduction to Stage Management
- 369. Costume Design
- 373. Drama for Teaching and Learning (cross-listed with Education)
- 375. Theatre, Sustainability, and the Natural World (cross-listed in Public Health and Environmental Studies)
- 4000-4999. Special Topics in Theatre/Performance. *(300-Level Courses)*
- 480. Independent Study.

490. SYE: Senior Project.

499. SYE: Honors Senior Project.

## Honors

To graduate with honors, a major must maintain a 3.5 GPA in the department and a 3.0 GPA overall; the major's senior project proposal must be approved for enrollment in PCA 498/499 SYE: Honors Senior Project; and the student must earn at least a 3.5 in PCA 498/499.

## Minor Requirements

Fulfillment of the minor requires six courses and students need to meet the following requirements:

1. All PCA minors must take EITHER:

107. Beginning Acting and 125. Introduction to Theatre.

Or

111. Public Speaking and 127. Introduction to Communication Studies.

2. Minors must take four additional PCA courses, at least two must be at the 200 or 300 level.

## Off-Campus and Transfer Credit

Students wishing to transfer in course credits must produce a syllabus to the department chair for the course they would like considered for credit. Students may transfer up to two credits from off-campus study toward a PCA major or minor.

## Courses

100. Beginning Ballet.

Fundamentals of classical ballet including barre, center work and across-the-floor movements with emphasis on body alignment and elements of ballet style. Material is presented in a progression from basic to more complex. Lectures consist of pertinent references to dance history, terminology, movement theory and dance films illustrating related subject matter.

101. Production Credit.

This is a practicum credit for students working on faculty-directed productions. Students are selected through the regular audition process and credit (either .25 or .5 credit units) is based on the size of the role and/or the time commitment involved. Students may take up to 1 unit of production credit. Pass/fail grading only. Permission of instructor required.

103. Stagecraft.

The study and practice of creating scenery for the stage, this course also explores the operation of the theater's physical plant. Material is presented in lectures and is further illustrated through the activities of the production studio.

105. Language as Human Experience.

We will tackle fundamental questions of what language is and how languages both create and constrain human potential. Our method for addressing these questions will be comparative. That is, at every step we will consider how languages do and do not vary across cultures in terms of their form, function and feeling. Along the way, we will examine the structure of language and the ways this structure varies across languages; we will survey the ways in which languages are transmitted from one generation to the next, and consider the ways in which languages inevitably change in the process; and we will explore language as a principal medium in which social identities are formed. No background in linguistics or anthropology is required, but a fundamental curiosity about culture and communication is expected. Offered every semester. *Dual-listed by Anthropology.*

106. Performing Diversity.

Using research, creative writing and personal experiences, this seminar explores various issues of multiculturalism and diversity on the St. Lawrence campus and in America today. We will engage a variety of texts to investigate the links between identity and oppression by race, class, gender, sexual orientation, differing abilities, and religion. As part of a significant research project, members of the class create performance texts (combining video presentations and live performance work) about specific research topic areas. To be a part of this seminar, you do not need prior experience in video production or acting/performance, but you must be willing to get involved with exploring both. This course is available to first-year students only as an FYS.

107. Beginning Acting.

An introduction to the basic mental and physical skills used in acting, including use of imagination, understanding of the self, character analysis, body flexibility and expression, and voice and diction. Coursework includes exploratory and centering exercises, improvisational techniques and scene and monologue study.

111. Rhetoric and Public Speaking.

An introduction to the art of public speaking, focusing primarily on the construction and critique of persuasive discourse. Students study the classical rhetorical tradition as a continuing influence on the contemporary theory and practice of persuasion.

113. Introduction to Performance Studies.

This course engages students in the analysis and performance of texts other than dramas (e.g., poems, short stories, personal narratives). The course emphasizes analysis of the dramatic situation in texts, process-centered workshops, and performance criticism.

125. Introduction to Theatre.

This course is designed to aid the student in an investigation into the various aspects of theatrical performance and process. This course will explore the five main aspects of the theatrical event: director, actor, playwright, designers (costume, scenic, lighting) and audience. Throughout the course students will discover the relationship between text/literature and the artistic nature of theatre to make and enhance meaning.

127. Introduction to Communication Studies.

This course explores the forms, functions, techniques, technologies and institutions of human communication with the goal of enhancing understanding of the complex dynamics of social interaction. Topics include communication and meaning; language, thought and communication; non-verbal communication; gender and communication; intercultural communication; and the mass media.

201. Introduction to Journalism.

A general study of journalistic principles and methods as well as extensive practice in the gathering and writing of news. In the first half of the semester, we will learn how to write and analyze basic types of stories in a style particular to new media, with an emphasis on accuracy, clarity, and efficiency. We will also discuss the mission of the journalist in a democratic society. In the second half of the semester, we will practice and refine such learned writing and reporting skills in an atmosphere closely resembling the conditions in a digital-era newsroom: covering actual events of local, state, national and international importance as they unfold in real time - all this under the pressure of real deadlines. *Dual-listed by English.*

202. Sound for the Stage.

This course explores artistic and practical aspects of using sound in support of theatrical productions. *Dual-listed by Music.*

204. Costume Design.

This course explores the artistic and practical aspects of designing costume for performance. Through a series of projects, students analyze the costume requirements for various plays, research period fashions and develop costume designs for specific characters and productions. Prerequisite: PCA 107 or PCA 125.

215. Dramatic Texts in Context.

This course examines how knowing the theatrical and cultural contexts of plays helps theatre practitioners make informed choices regarding how to stage them. Prerequisite: PCA 107 or PCA 125. *Dual-listed by English.*

223. Playwriting.

This course explores the processes of composition characteristic of the playwright. In a series of weekly assignments, various aspects of the art are introduced, e.g., characterization, dialogue, dramatic action and others. The course concludes with the writing of a one-act play. Students read exemplary plays from the modern repertoire. *Dual-listed by English.*

225. Peer Mentoring in Rhetoric and Communication.

This course is designed to train students who will work as rhetoric and communication mentors in the University's WORD Studio. Permission of instructor required.

230. Beginning/Intermediate Modern Dance.

This course emphasizes development of basic modern dance concepts and technique, including increase of students' strength, control, rhythmic awareness and stage presence. Specific techniques touched upon and/or covered in depth include, but are not limited to, O'Donnell, Nickolas, Garth Fagan and Graham. The course provides an in-depth knowledge of the history of modern dance. Students will strengthen their choreographic skills and produce an original piece.

235. Beginning/Intermediate Jazz Dance.

This course is for the elementary dance student interested in developing the basic movement skills of jazz dance. Emphasis is placed on the Jack Cole technique. Course material consists primarily of building a solid technical base, learning isolations, rhythmic difference and dynamics. The course provides an in-depth knowledge of jazz dance, its phenomenon and its changing character throughout the years. Students are exposed to Broadway, concert and commercial jazz styles, strengthen their choreographic skills and produce an original piece.

239. Media Industries.

This course surveys the historical development of traditional media industries such as newspapers, magazines, books, television, radio, film, music recording and video games, as well as the issues related to the emergence of digital technologies epitomized by the Internet. It likewise focuses on the historical evolution of two other closely related fields advertisement and public relations. *Dual-listed by Film and Representation Studies.*

244. Techniques of Screenwriting.

An introductory study of basic technical problems and formal concepts of screen writing. The study of produced screenplays and formal film technique, along with writing scene exercises, builds toward the construction of a short (50-minute) script. *Dual-listed by English; also offered through Film and Representation Studies.*

250. Communication & Performance Research Methods.

This course introduces students to a variety of qualitative research methods and theoretical lenses used by scholars of communication, rhetoric, and theater. Students will be exposed to existing research that uses these methods and will practice these approaches throughout the semester. The capstone project involves developing an individual research projects that uses a particular method of qualitative analysis to answer questions about a communicative and/or performative text or act.

255. African American Drama.

African American drama is a tradition that has unique themes and forms with sources in African ritual and language; gesture and folklore; the Southern Baptist church; the blues; and jazz. Students examine plays, read essays, view videos and listen to music to discover the qualities that make this drama a vital resource of African American culture and an important social and political voice. *Dual-listed by English.*

270. Collaboration Across the Arts.

The direction of this course is determined largely by the unique combination of students who participate. Students form groups of two or three to work on a collaborative project of their own design reflecting their collective interests. For example, a pair of students may create a multimedia work that draws connections between image and sound. Students critique works in progress, study exemplary works, discuss relevant aesthetic issues, trace connections across media and consider strategies for collaborative work. Prerequisite: permission of the instructor. *Dual-listed by Music; also offered through Art & Art History.*

3000-3999. Special Topics in Rhetoric/Communication Studies.

The content of each course or section of these 200-level special topics courses varies and will be announced each semester.

3000-3999. Special Topics in Theatre/Performance Studies.

The content of each course or section of these 200-level special topics courses varies and will be announced each semester.

301. Advanced Modern Dance.

Advanced Modern Dance is an exploration of advanced modern technique and theory in a variety of styles of modern dance. The class emphasizes educating the body as an instrument for artistic expression as well as development of flexibility, strength, coordination and awareness of principles of motion. The class will also work on choreography and composition exercises using the concepts of space, time, effort and shape.

Prerequisite: PCA 100, PCA 235, or PCA 230.

303. Stage Lighting.

An investigation of theatrical lighting equipment and its applied use in producing drama, concerts, and dance on the modern stage. The course includes a study of basic electricity, lighting instruments, computerized lighting control and design procedures. Materials are presented in a lecture/demonstration format and are further explored in the lighting lab and departmental productions. Prerequisite: PCA 103

305. Make-Up Design.

This course will expose students to various aspects of theatrical and entertainment makeup. Students will learn the tools and techniques of makeup application for theatre, opera, dance, and film. Applications will include makeup for basic highlight and shadow, character, old age, fantasy, injury and other special effects make-up applications. Visual research methods and methodology for communicating designs and presentations will be explored.

306. Advanced Screenwriting.

An extension and intensification of PCA 244. Students are expected to work independently on the preparation of two feature-length screenplays. Workshop format emphasizes the revision and editing process. Prerequisite: PCA 244. *Dual listed by English; also offered through Film and Representation Studies.*

307. Characterization.

An intensive study of the acting process building on skills developed in PCA 107. The course focuses on character development in psychological realism and is intended to expand the actor's range with both scene and monologue work, as well as to expand skills in voice/body integration and script analysis. Prerequisite: PCA 107 or PCA 125.

309. Acting Styles.

A concentrated study of three theatrical styles: Greek tragedy, Elizabethan drama and comedy of manners. The course includes reading and research on the theatre and culture of each historical period, followed by an intensive exploration of their vocal and physical styles through guided improvisations, exercise and scene study. Prerequisite: PCA 107.

310. Culture & Media.

Print or electronic mediating technologies have accompanied humans for more than five centuries and at some point people started questioning the extent to which they influenced, or as we will learn to say, co-constructed our everyday reality. This class surveys some of the important intellectual contributions to this inquiry – media theories and seminal studies. At the same time, it follows some of the most significant contemporary debates that reflect the symbiotic relationship between the media and our own culture. *Also offered through Film and Representation Studies.* Prerequisite: PCA 111 or PCA 127.

311. Advanced Public Speaking.

Intensive study of the principles and practices of researching, organizing, writing, delivering and criticizing persuasive speeches. Students employ contemporary theories of persuasion to analyze a variety of rhetorical situations. Students construct persuasive speeches for different speaking situations in order to develop critical and practical skills. Prerequisite: PCA 111.

314. Devising for Performance.

This course focuses on the process of adapting and staging non-dramatic texts (e.g., novels, short stories, poems) for performance. The class emphasizes the process of selecting, adapting, scripting and rehearsing texts for performance. Prerequisite: PCA 107, PCA 113, or 125.

315. Gender and Communication.

All of our communications have a gendered component, and all gender performances are, by definition, communicative. In this course, we explore some of the many contexts, media and modalities through which communication and gender intersect. We examine both how we perform gender and how we become gendered through the processes of social interaction. Prerequisite: PCA 127, PCA 111, or GNDR 103.

316. Advanced Communication Studies.

This course surveys contemporary theories and principles of human communication and complements this inquiry with practical exercises designed to test and explain the theories. Course material focuses on interpersonal communication, non-verbal communication, mass communication, intercultural communication and the relationship between gender and communication. Prerequisite: PCA 127.

317. Performing Poetry.

“Milk tongue, goatfoot, and twinbird” are the words that poet Donald Hall uses to describe what the voicing and embodying of poetry feels like to him. It’s something with taste and texture in our mouths, something we feel in our bodies, and something that sings, chants, and fills the world with sight and sound. In this course we focus on the performance of various poetic forms: traditional fixed forms, open verse, concrete poems, found poems and others. We will add to Hall’s list of ways to describe what happens when poetry returns to its roots in the oral tradition, and in the process examine the intersections of contemporary poetic theory and performance theory. Prerequisite: PCA 107 or PCA 113. *Dual-listed with English.*

318. Argumentation and Debate.

Study of the nature and functions of argument: the classical and contemporary concepts of rationality, truth, knowledge and models of argument; and the evaluation of argument in formal and ordinary language situations. Students participate in several argumentation and debate assignments to develop critical and practical skills. Prerequisite: PCA 111. *Cross-listed with Peace Studies.*

319, 320. Shakespeare.

An intensive study of Shakespeare's plays; 319 concentrates on Shakespeare's histories, comedies and romances, while 320 focuses on the tragedies. Prerequisites: PCA 125 or ENG 110 and one 200-level English literature course; or two 200-level English courses. *Dual-listed by English; also offered through European Studies.*

321. Intercultural Communication.

This course explores theoretical and rhetorical frames around culture, cultural difference and cultural encounter, the purpose being to enable participants to become more culturally sensitive and effective communicators. Prerequisite: PCA 127. *Dual-listed by African American Studies.*

322. Native American Oral Traditions.

This course examines the oral literatures of Native Americans and the incorporation of these oral traditions into written texts. Native American oral traditions are examined using written texts, videos and live performances. With a focus on origin stories, mythic heroes, and rituals, the course considers Native American views of storytelling, family, religion/cosmogony and language. Prerequisite: PCA 113 or PCA 125. *Dual-listed by Native American Studies.*

326. American Public Address.

A study of American history through examination of the speeches of spokespersons for social, political, legal and religious institutions and movements. From Thomas Jefferson to George Bush, from Susan B. Anthony to Phyllis Schlafly, from George Wallace to Martin Luther King Jr.: a study of the impact of rhetorical strategies upon ideas and events and of ideas and events upon rhetorical strategies. Prerequisite: PCA 107 or PCA 125. *Cross-listed with Peace Studies.*

327. Drama By and About Women.

Using theoretical writings and dramatic scripts, this course asks what, if anything, is different about reading drama written by women about women. Although the foundations of this course are rooted in a variety of feminist perspectives, it focuses on a way of reading rather than on any one of a group of political stances. Students are expected to respond subjectively to the voices of women articulated in the plays and, at the same time, use critical skills to comprehend the social, historical and cultural contexts that shaped them. Prerequisite: PCA 125.

328. Interpersonal Communication.

This course examines the social situations in which people create and maintain interpersonal relationships, exploring the myriad social and cultural factors that impinge upon the success of these relationships. Topics include identity, relationship formation, family, friendship, intimacy, gender and sexualities, relationships at school and work, conflict, and digitally mediated interpersonal communication. Prerequisite: PCA 111 or 127.

329. Rhetoric of Social Movements.

This course examines the rhetorical strategies employed in contemporary American social movements (civil rights, Vietnam/anti-war movement, women's liberation, American Indian Movement, gay and lesbian rights). Cultural texts, speeches, manifestos, sit-ins, marches and songs drawn from each of these calls for change are examined and interpreted using a variety of rhetorical theories. Prerequisite: PCA 111 or PCA 127. *Cross-listed with Peace Studies.*

330. Ritual Studies.

This course examines the nature of rituals, how humans use rituals, the various types of rituals, and how rituals evolve over time. Students explore the origins, histories, and methods of analysis of rituals as well as learning how we produce them. Prerequisite: PCA 107, 113 or PCA 125.

331. Presidential Campaign Rhetoric.

This course examines the forms and functions of rhetoric within the context of presidential election campaigns. Students engage in a variety of formal and informal oral and written exercises related to the persuasive strategies that candidates, the media and independent organizations use to advance their political agendas. Prerequisite: PCA 111 or PCA 127. *Cross-listed with Peace Studies.*

332. Directing.

This course provides the advanced student with practical skills and an understanding of directing methods, including intensive script analysis, concept development and articulation, composition/picturization and collaboration with other theatre artists. Prerequisites: PCA 107 or 125; PCA 103 is recommended.

333. Rhetorical Criticism.

This course is designed to foster increased awareness of the diverse forms and functions of persuasion in contemporary society and to improve students' ability to function as discriminating consumers of rhetorical texts. While the course includes extensive reading and analysis of public speeches, it is also intended to heighten student awareness of the presence of persuasive intent in texts not traditionally considered rhetorical, e.g., poems, plays, songs, paintings, music videos and news broadcasts.

334. Environmental Communication.

Environmental Communication (EC) begins with the premise: language shapes how humans live with the natural environment. As a discipline EC recognizes that how we speak about the environment and who is allowed to speak about the environment affect how humans view, interact with, and make policy about their surroundings. Throughout the course students examine how environmental discourse connects issues of citizenship, community building, and environmentalism. Students will encounter theoretical concerns, environmental history, and have opportunities to produce their own environmental communication. Prerequisite: PCA 111 or PCA 127. *Cross-listed with Peace Studies.*

335. Sex Talk.

Sex Talk is an examination of dominant discourses around gender, sex and sexuality with the objective being to have students not only critically analyze these discourses but to interrupt their creation in order to foster counter discourses that challenge hegemonic norms, including misogyny and homophobia. We will explore youth culture and university cultures, and examine how these cultures create, are created by, respond to, and challenge patriarchy, hegemonic masculinities and femininities. The course culminates in students designing and delivering peer education programs/performances on campus. Prerequisite: PCA 111 or PCA 127. *Cross-listed with Peace Studies; dual-listed by Gender and Sexuality Studies.*

336. Rhetoric and Citizenship.

Throughout the course, students explore citizenship through the lens of rhetorical theory and history, study philosophical debates over citizenship, and debate the current state of citizenship in U.S. society. While engaged in these theoretical discussions, students enact their own civic engagement by examining their communities of obligation, identifying concerns in their communities, and using rhetoric to address a community concern. Prerequisite: PCA 111 or PCA 127. *Cross-listed with Peace Studies.*

338. Twentieth-Century Avant-Garde.

Students are exposed to theoretical writings, dramatic texts and performances that reflect the continuing experimentation in the theatre since the 1890s. Students examine artistic reactions to a post-Darwinian and post-Freudian worldview and are exposed to the various methods by which playwrights and theatre practitioners have grappled with finding new ways of articulating what it means to be human in an industrialized world. Prerequisites: PCA 107 or PCA 215. *Dual-listed by European Studies.*

340. Performance Art.

Students read essays about the historical tradition of performance art and the relationship between performance art, theatre, dance and the visual arts, and consider the work of contemporary performance artists such as Karen Finley, Spaulding Gray, Laurie Anderson, Rachel Rosenthal and Pina Bausch. Students also learn about performance art by doing it—by engaging in the process of creating and producing their own performance art pieces. Prerequisite: PCA 107, PCA 113, or 125.

342. Blogging the Globe: News Analysis and Investigative Journalism.

This course fosters the tools necessary to be critical readers and viewers of the news in a complex, globalized media environment while also giving students the opportunity to become investigative journalists themselves. In addition to examining patterns in how global events are covered in mainstream and independent/alternative media outlets in the U.S. and elsewhere, the course explores deeper structural issues concerning discourse, ideology and the representation of "other" cultures; the relationship between media, corporate and state power; and the role of institutions in defining the bounds of "legitimate" knowledge. Students in the course contribute to [The Weave](https://www.weavenews.org/) (<https://www.weavenews.org/>), an online public intellectual project, by researching and blogging about underreported stories. Prerequisite: PCA 111 or PCA 127. *Dual-listed by Global Studies.*

### 343. Taboo Performances

A rigorous, academic study of the ways that we read bodies in performance. The course uses a theoretical lens to examine what is deemed “acceptable” onstage versus what is considered “taboo” and the privilege wrapped up in those discourses. Course readings focus on dramatic literature, theory, and criticism. Students read plays which include taboo acts, engage with the criticism and theory of the dramatic literature, and frame the dialogue through performance and body theory. Fulfills DIV13 requirement.

### 355. Studies in World Dramatic Literature.

The study of dramatic literature primarily produced outside the United States and Great Britain. Focus may be upon cultural coherence (e.g., Francophone dramatic literature), discrete dramatic movements on a particular continent (e.g., South African drama), shared thematic concerns (e.g., the role of women) or a period-specific examination of non-Anglo drama. Prerequisite: varies. Prerequisite: PCA 107 or PCA 125.

### 360. The Public Sphere of Renaissance Venice.

At the peak of its Renaissance period (1480-1530), the Republic of Venice presented itself as a perfect embodiment of Plato’s and Aristotle’s classical republican model. At the same time, it reached a significant hegemonic position in the Western world measured both by hard (military and economic) as well as soft (political philosophy, arts and architecture) standards of power. This course is conceived as a multidisciplinary reading and research seminar examining the complexity of the public life in the famous Italian city-state. Instructor’s permission required. *Dual-listed by Economics, Government, Global Studies, History, World Languages (ITAL) and Philosophy.*

### 361. London Coffeehouse Culture & Modernity.

German philosopher Jürgen Habermas famously described the culture of the early 1700s London coffeehouses as the spark that kindled the advent of modern democracy. Indeed, the last licensing act in England expired in 1695 and with it also the censorship of press. Within the next decade, London was flooded with newspapers and pamphlets that openly scrutinized practically all aspects of public, but also private life. They were read and discussed in coffeehouses that soon became social institutions of their own right. Yet, such idealized world of London coffeehouses also had another, much darker side. Relying on secondary sources as well as original newspaper articles, essays and pamphlets published mainly by Addison, Steele and Defoe, the proposed course’s main goal is to help students mentally recreate the atmosphere of London at the dawn of what we call the Enlightenment era. Prerequisite: PCA 111 or PCA 127. *Dual-listed by English.*

### 362. Introduction to Stage Management

Introduction to Stage Management will explore how the role of the stage manager changes through the theatrical production process from concept meeting through rehearsals and show opening and closing. Students will learn organizational skill and how to effectively collaborate and communicate with the director, design team, actors and stage crew both onstage and off as they work towards opening night where they will be the one in charge of running the performance. Students will create a production

binder, learn how to take meeting minutes, and document design for blocking notes, rehearsal calendars, rehearsal reports and performance reports.

### 368. Costume Design

This course explores the artistic and practical aspects of designing costumes for performance, as a practice and art. Through a series of projects, students analyze the costume requirements for various plays, research period fashions and develop costume designs for specific characters and productions. Visual research methods and methodology for communicating designs will be explored. Students will learn the techniques and processes the costume designer utilizes for designing for entertainment (theatre, television, film, opera, and dance).

### 370. Against Health: Rhetoric & the Health Humanities.

The links between rhetoric and health reach back to Plato, who famously compared the practical art of medicine to the sham art of rhetoric. According to Plato, medicine was concerned with improving lives and health, and rhetoric was concerned only with improving the appearance of things. This course will flip Plato on his head. By approaching health and medicine as always rhetorically mediated, we will interrogate the emphasis on healthy living that pervades the civic sphere. Our primary objective will be to consider how health, wellness, and sickness are influenced by rhetorical norms and practices; how patient-provider interaction, institutional imperatives, and public deliberation structure health care opportunities and decision-making; how medical discourses influence health care practices and policies; and what these reveal about the character and function of the rhetorical shaping of health. Readings will delve into topics such as AIDS, contagion, cyberchondria, depression, obesity, and zombies. Prerequisite: PCA 111, PCA 127, or BIOL 3057.

### 371. By Design

Imagine you've been charged with producing an ad campaign that promotes fair trade coffee for three very different target audiences-say, college students, middle-aged housewives, and the folks who do the purchasing for major restaurant chains. What media would you use to reach each of these audiences? Billboards? Ads on buses and subway trains? Direct mail flyers? Newspaper spots? Radio PSA's? Television PSA's? YouTube videos? A website? Cell phone apps? How would the texts targeting each of the three target audiences differ from one another? How would you justify the media choices and persuasive strategies you selected for each audience? These are the sorts of questions that students enrolled in this course will confront. While some attention will be paid to persuasive texts produced by others and to classical and contemporary theories of persuasion, this will be a project-driven course in which students research a social issue of their own choosing and learn to use a variety of software programs (e.g., Photoshop, In Design, Audacity, & Final Cut Pro) to create a persuasive campaign that targets at least three specific audiences. No prerequisites. Fulfills ARTS Distribution.

### 373. Drama for Teaching and Learning

Drama for Teaching and Learning is focused on using drama and theatre techniques as a pedagogical approach to teaching other subjects. Students will work in collaboration with one another to plan and teach drama lessons focused on science, math, English, reading, social studies, and social justice issues.

While this class focuses primarily on the use of drama with children and youth, the facilitation methods and drama techniques can be applied in a variety of settings, including museums, prisons, hospitals, community centers, and businesses. This class often has a community-based learning component, which will allow students to partner with local schools.

### 375. Theatre, Sustainability, and the Natural World

This course encourages students to consider the ways in which the discipline of theatre engages with the natural world and the ethical concerns around how humans interact with the environment. By doing so we will reveal how theatre as an art form relates to other disciplines such as environmental sciences, politics, and government. By reading plays with ecological themes, students will have an opportunity to consider how playwrights have imagined our role within the natural environment, as well as how playwrights have also attempted to use theatre as an artistic platform for advocacy around environmental issues. We will also consider how the theatre as a discipline impacts the natural world through traditional production practices, some of which may be considered wasteful and harmful to the environment, as well as to consider ways in which artists can create more sustainable artistic practices. This dual focus on the study and creation of theatre provides students with multiple opportunities to engage with theory and practice of theatre that engages with ethical issues surrounding theatre, sustainability, and the natural world. Fulfills Environmental Literacy Distribution. Cross-listed with Public Health and Environmental Studies.

### 4000-4999. Special Topics in Rhetoric/Communication Studies.

The content of each course or section of these 300-level or 400-level special topics courses varies and will be announced each semester.

### 4000-4999. Special Topics in Theatre/Performance Studies.

The content of each course or section of these 300-level or 400-level special topics courses varies and will be announced each semester.

### 480. Independent Study.

Supervised research on an independent basis. Students wishing to register for independent project credit must submit a proposal for approval before registering for this course. Proposals are due two weeks before the end of classes in the prior semester. Proposal guidelines are available in the Arts Office; proposals should be submitted directly to the faculty member whom the student wishes to supervise the independent study. Only juniors and seniors may propose independent projects. Prerequisite: permission of department chair.

### 489/490. SYE: Senior Project.

Supervised research on an independent basis. Students wishing to register for independent project credit must submit a proposal for approval before registering for this course. Proposals are due two weeks before the end of classes in the prior semester. They should be submitted directly to the faculty

member whom the student wishes to supervise the independent study. Proposal guidelines are available in the department chair's office. Only juniors and seniors may propose independent projects.

498/499. SYE: Honors Senior Project.

The senior project is a capstone designed to allow students to demonstrate their ability to synthesize the analytical and practical skills associated with the discipline. Only those students who have had their senior project proposal approved by the department may register for this course. Proposals are due two weeks before the end of classes in the prior semester. A copy should be submitted to all department members' mailboxes. Proposal guidelines are available in the department chair's office. Students are assigned a three-person honors project committee, one of whom will be designated as the student's primary senior project advisor, with the other two serving as readers. Students must orally defend their project. Project Proposal Guidelines are available in the Arts Office. Students are assigned a senior project advisor who is solely responsible for overseeing the execution and evaluation of the project.

498/499. SYE: Honors Senior Project.

The senior project is a capstone designed to allow students to demonstrate their ability to synthesize the analytical and practical skills associated with the discipline. Only those students who have had their senior project proposal approved by the department may register for this course. Proposals are due two weeks before the end of classes in the prior semester. A copy should be submitted to all department members' mailboxes. Proposal guidelines are available in the department chair's office. Students are assigned a three-person honors project committee, one of whom will be designated as the student's primary senior project advisor, with the other two serving as readers. Students must orally defend their project.

## Philosophy

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Major and minor offered.

See also Environmental Studies-Philosophy Combined Major

Visit the philosophy webpage at <https://www.stlawu.edu/offices/philosophy>.

### Major Requirements

A major in philosophy consists of 10 courses, distributed as follows:

#### Core Courses (5)

- 201. Ancient Philosophy
- 202. Reasoning
- 203. Ethical Theory
- 208. Modern Philosophy
- One course in non-Western Philosophy (223. Asian Philosophy OR 232 Africana Philosophy OR other approved course).

Students are strongly encouraged to begin their philosophical studies with 100, 103 or 120, since a 100-level course is often a prerequisite for core courses. The core courses do not have to be taken in any particular sequence, but we strongly recommend that students take 201 and 208 in sequence in their sophomore year.

### **Electives (4)**

At least two electives must be at the 300 level and only one 100-level course may count toward the major.

### **SYE course or course sequence (1)**

Normally PHIL 400 Metaphilosophy

Or PHIL 498-499: SYE Honors Thesis (for students eligible for honors and interested in writing an honors thesis).

## **Environmental Studies–Philosophy Major**

A combined environmental studies–philosophy major is available. Please consult the Environmental Studies section of this *Catalog* for the complete list of courses.

## **Honors**

To receive honors in philosophy, a student must satisfy the requirements for the major. In addition, he or she must have a 3.5 grade point average in the department and complete a departmentally approved honors project (PHIL 498/499) as his or her SYE.

## **Minor Requirements**

A minor in philosophy consists of five to nine courses that must include:

1. 202 and 203
2. 201 and/or 208
3. 223 or 232
4. Only one 100-level course counts toward the minor.

## **Preparing for Graduate Studies in Philosophy**

Majors considering graduate school in philosophy are strongly advised to take PHIL 302, Symbolic Logic, plus an advanced course in the subfield of philosophy they may wish to specialize in at the graduate level. Those aspiring to graduate school in philosophy should also plan to write a senior thesis.

## Preparing for Law School

A philosophy major or minor offers an excellent background for the study of law. A student who wishes to go to law school is strongly advised to take PHIL 202, Reasoning, and PHIL 302, Symbolic Logic. PHIL 206, Political Theory, is also recommended.

## Courses

### 100. Introduction to Philosophy.

A launch-course into the wide world of philosophical inquiry that approaches the field through consideration of such perennial problems as ultimate reality, free will, knowledge, morality, political obligation and the existence of God. Depending on instructor, this course may also explore some aspects of social identity, such as race and gender, from a philosophical perspective. No prerequisites.

### 103. Philosophy East and West: An Introduction.

A thematic introduction to philosophy, taking a comparative approach, looking at philosophy not only of the Western tradition, but also of the Eastern tradition. Themes include the idea of a “good life,” ethics, knowledge, reality, the self, and aspects of social identity such as race and gender. We critically explore both the commonalities and differences across the traditions. Students learn how to analyze difficult philosophical texts and arguments critically, develop writing skills and ask and answer questions in a philosophical manner. *Also offered as ASIA 213.* No prerequisites.

### 120. Introduction to Peace Studies.

The purpose of peace studies is to explore the potential for nonviolent methods of building social, political and economic justice. This course intentionally searches for alternative ways of understanding conflict. We ask questions such as, Can we define “peace” in more positive terms than the unrealistic “absence of conflict”? Can conflict be positive or even transformative? Are “peacemakers” different from the rest of us? Can we all learn to live harmoniously with others who are very different from us? What are ways to cultivate the inner peace that gives people the strength and insight to deal with conflict creatively and positively? *Also offered as PEAC 100.* No prerequisites.

### 201. Ancient Philosophy.

A historical study of Western philosophy from its beginnings in ancient Greece through the end of the classical period, with primary emphasis on Plato and Aristotle. Representative original works are read dealing with such problems as reality, the self, knowledge and value. Prerequisite: any 100-level philosophy course or permission of the instructor. *Also offered through European Studies.*

### 202. Reasoning.

Critical reasoning is the ability and tendency to be moved by good reasons and not by poor ones. This course examines arguments—how to identify them, how to evaluate them, and how to produce them—so that students will be better prepared to reason critically about issues of importance to themselves

and to society. Topics may include both the formal and informal evaluation of arguments, scientific reasoning, and fallacious reasoning. No prerequisites.

203. Ethical Theory.

An introduction to ethical theory, drawing on texts from the Greeks to the present. What is the nature of moral obligation? What character traits are human virtues and vices? How do we discern goodness and evil? How do we justify ethical judgments of any kind? This is an appropriate selection for students with some previous experience in philosophy and provides an important background for further study in philosophy or other disciplines. Prerequisite: any 100-level philosophy course. *Also offered through Peace Studies.*

206. Introduction to Political Theory.

A study of the answers that philosophers from Plato to Nietzsche have given to the question, "How should political life be organized?" This question leads us to consider the related problems of justice, power, equality, freedom and human nature. The course includes discussion of the strengths and weaknesses of liberal democracy. *Also offered as GOVT 206 and through European Studies and Peace Studies.*

208. Modern Philosophy.

This course examines the history of European philosophy through the "modern" period: the 17th and 18th centuries. This was an important period in that it gave birth to the phenomenon of "modern science" and was also the period of time in which science and religion became disciplines that separated out from philosophy. Fueling these changes were philosophical debates on the nature of knowledge and reality. The course explores both the systematic thinking of key philosophers of this era, and the historical development of the different viewpoints on these topics. Prerequisite: any 100-level philosophy course or permission of instructor. *Also offered through European Studies.*

216. Philosophical Perspectives on Sport.

The study of ethics and moral reasoning is introduced through the lens of sport. Topics such as moral skepticism, ethical relativism, utilitarianism vs. Kantianism, competing concepts of impartiality, the care vs. justice perspective, positive vs. negative duties and the doctrine of double effect are explored. Students will be asked to evaluate their own opinions, beliefs and attitudes that govern their judgment and/or actions within the realm of sport. *Also offered through Sports Studies and Exercise Science.*

223. Asian Philosophy.

The aim of this survey course is to provide students with a *broad introduction* to some of the key thinkers and concepts of some of the major traditions in Asian philosophy: Indian Philosophy, Chinese Philosophy and Japanese Philosophy. The course uses Buddhist philosophy as a *fil conducteur* or guiding thread to narrow the focus, but also covers some non-Buddhist Asian Philosophies. We pay particular attention to the themes of reality, knowledge, self, and ethics, and students have an opportunity for

experiential learning. *Also offered through Asian Studies.* Prerequisite: any 100-level philosophy course, or permission of the instructor.

### 232. Africana Philosophy.

This course engages a set of questions that emerge out of three interrelated bodies of philosophic literature—African philosophy, Caribbean philosophy, and African American philosophy—which comprise an inclusive category of African diasporic thought (or Africana philosophy). We read texts on the metaphysical question, “What is Africana philosophy?” We also engage several philosophers on the political philosophical concerns and legacies of colonization and American slavery, and on the epistemological and ethical questions of Race and racism. Prerequisite: any 100-level philosophy course or permission of the instructor. *Also offered through African Studies and African American Studies.*

### 290. Gender and Feminist Theory.

This course examines theoretical explanations of gender, gender difference and gender inequality in society. It includes introductions to some of the questions that shape contemporary feminist theory, feminist writings in multiple disciplines and feminist movements inside and outside the academy. The focus is on how an awareness of intersections of race, class, sexuality, gender and ethnicity is vital for disciplinary and interdisciplinary study in feminist theory. Theoretical works are drawn from the humanities, arts and literature and the social sciences. Prerequisite: GNDR 103. *Also offered as GNDR 290.*

### 301. Philosophy of Science.

Why does science produce such reliable knowledge? Is there really a “scientific method”? Does science get at truth, or is scientific knowledge socially constructed? In addition to these questions, we consider whether science advances according to a steady and rational process, or whether it advances according to radical “scientific revolutions.” We also try to identify what (if anything) distinguishes scientific knowledge from other kinds of knowledge, and reflect on whether scientific knowledge is comprehensive enough to constitute a complete world-view. Prerequisite: any 100-level philosophy course, PHIL 202, or permission of the instructor. *Also offered through European Studies.*

### 302. Symbolic Logic.

A study of elementary symbolic logic. Topics include sentential and predicate logic, some philosophy of logic, and Gödel’s Theorem. Prerequisite: Philosophy 202 or permission of instructor. *Also offered through Computer Science and Mathematics.*

### 303. Philosophy of Science and Religion.

In this course, we examine the nature of scientific knowledge by studying the formulation of the “scientific method” during the logical positivist movement in the early 20th century. Logical positivism failed, and both its rise and fall left us in an epistemological crisis. One effect of this crisis is the common view that science and religion are incompatible. But are they really incompatible? In this course, we will

examine the nature of scientific knowledge and religious knowledge, and you can draw your own conclusions! Prerequisites: any 100-level philosophy course, PHIL 202, or REL 102.

### 310. Environmental Philosophy.

What obligations, if any, do we have towards the environment? What changes should we make in our own lives in light of those obligations? How does material consumption relate to our happiness? If we can be happy consuming less, why do so many of us continue to consume so much? How do our attitudes towards the environment reflect our social position? What is the difference between the natural and the artificial? This course examines such questions in order to come to grips with our relationship with the environment, and what these ideas mean for the way we lead our lives. Students will explore these questions in relation to the global community, to our local community, and in relation to their own lives and choices. Prerequisite: any 100-level philosophy course, or Environmental Studies 101, or permission of the instructor. *Also offered as ENV5 (Philosophy of the Environment) 310, ODST 310, and through Peace Studies.*

### 327. Phenomenology and Existential Philosophy.

Phenomenology is the study of human experience and of the ways things present themselves to us in and through such experience. The core principle of phenomenology is the doctrine of "intentionality." Every experience, every act of consciousness (seeing, hearing, smelling, remembering, etc.) is intentional: it is always an "experience of" or "consciousness of" something. Existentialism combines the phenomenological tradition of Husserl and Heidegger with the earlier forms of existential philosophy found in such thinkers as Kierkegaard and Nietzsche. Freedom, responsibility, the nature of being, the individual, community and communication are all themes of existential philosophy. The modern existentialism of Sartre, Camus, Merleau-Ponty, and Beauvoir take up the themes of the creation, destruction and revaluation of meaning in life when there is no absolute standard by which to judge or measure our actions. Prerequisite: PHIL 201, 203, 208, 223, 232 or permission of the instructor. *Also offered through European Studies.*

### 333. Ethics of Global Citizenship.

This research seminar is designed to address, from a philosophical perspective, some of the difficult ethical questions arising from the global organization of the world. Readings include classical, non-Western and alternative theories of justice and peace. The course interrogates the discourses surrounding patriotism and cosmopolitanism, peace and violence, terrorism and war, justice and retribution, and the debates surrounding relativism versus universalism, especially with regard to the claims for human rights. Students undertake research projects dealing with the ways these issues are being negotiated in countries where they studied abroad, and develop ethical positions on their own responsibilities toward global citizenship. *Also offered as GS 333 and through Peace Studies.*

### 334. Feminist Philosophy.

In this upper division inquiry based seminar we explore the relationship between ways of knowing and ways of being-in-the-world through textual analysis of feminist philosophical texts on epistemology and ethics. After an introduction to feminist ways of knowing, and readings addressing specific topics of

concern for feminist philosophers in the first part of the course, we then engage in readings around a particular theme in feminist philosophy. Themes have included, but are not limited to: the body, the self, intersections of race, class, sexuality, gender and ethnicity, Asian feminist philosophy, contemporary issues. Prerequisite: PHIL 201, 203, 208, 223, 232, GNDR 290 or permission of the instructor. *Also offered as GNDR 334.*

### 343. Political Theories of Violence and Nonviolence.

Carl von Clausewitz famously remarked that “war is a continuation of politics by other means,” which suggests that politics is intimately connected with violence even as it seeks to avoid it. In this discussion-based seminar we will examine how key figures throughout the history of political thought have conceptualized the relationship between politics, violence, and non-violence. Topics covered in the course include just war theory, the role of violence in the state, non-violent civil disobedience, and revolutionary violence associated with working class and anti-colonial struggles. *Also offered as GOVT 345 and through European Studies and Peace Studies.*

### 350. Philosophy of Mind.

This course examines the nature of the mind. Is your mind the same thing as your brain? What is consciousness? Could a computer think and feel like we do? How is that we are able to think about the world outside of our own heads at all? Drawing on work in philosophy, psychology, neuroscience, and artificial intelligence, this class investigates questions about the conceptual foundations of the various ways in which we try to understand the mind and brain. Students will not only develop a better understanding of these central questions, but also explore the interplay between philosophical and empirical approaches to a shared problem.

### 354. Bioethics with CBL

A growing field of contemporary ethical inquiry, bioethics grapples with the unique ethical quandaries emerging in the light of new biotechnologies (affecting both human and non-human forms of life), the universal need for health care, and public health concerns at large. Topics include birth and reproductive justice, the impacts of racism on health and health care, and the implications of various approaches to bioethics for those living with disabilities (a group which may well include all of us at some time in our lives). We study the ‘four principles’ of bioethics, widely taught in medical school today and used by many hospital ethics boards while also considering several challenges to this approach, including those emerging from the field of care ethics. Expanding connections beyond the walls of the classroom, students support different communities with health-based needs in our local area through the course’s community-based learning component (CBL).

### 359. Philosophy of Language

Language is ubiquitous in our lives. We use it in class, we use it to talk to friends, to read great works of literature, to harm others, to tell jokes, and perhaps, even to think. Our use of it is so common, that it almost begins to seem transparent. We forget we are using language, and we forget what a simply astonishing fact it is that we can understand each other at all. When we think about language, we usually have in mind learning this or that language. But how does language work in the first place? How

do words get their meaning? How do the meanings of sentences arise out of the meanings of words? How do words relate to things in the world? How does language relate to thought? How can we use language to communicate rich, context-sensitive meaning? What is a language? In this course, we will investigate the complex and fascinating issues that arise when we turn our attention onto the very ability we use when doing everything from philosophy to texting friends.

367. Feminist Post-colonial Theory.

Post-colonial theory addresses issues of identity, culture, literature and history arising from the social context of colonization, resistance to colonization, liberation from colonization and the formation of new nations. It crosses the boundaries of the social sciences and humanities in its approach to theory and analysis of the discourses used to constitute colonial and post-colonial subjects. *Also offered as ENG 367, GNDR 367 and GS 367.*

380. Philosophy of Peace.

In this course we explore the meanings of terms such as peace, justice, conflict, violence, pacifism, conscientious objection, and civil disobedience, and we will consider the relationships among these terms. We will also consider questions such as: Is it possible to create a truly just world? Is it possible to respond to serious conflict or oppression nonviolently? Is the use of violent force ever justified? Is a “just war” possible? We will read classic works by philosophers and others on these topics. We will also reflect on our own identities, how power is constructed in our world, and will conclude the course by envisioning a better world and considering how to work towards creating it. Pre-requisite: any 100-level Philosophy course, or PEAC 100. *Also offered as PEAC 380.*

400. SYE Seminar: Metaphilosophy.

This course provides an opportunity for critical reflection on the nature and value of philosophy itself. What is philosophy? What are the methods of philosophical inquiry? Does philosophy have value in today’s world? We read what other philosophers, past and present, and in both Western and non-Western traditions, have had to say about these questions. Other members of the philosophy department will visit the class to share their own perspectives and methods. Students practice and reflect on a variety of philosophical methodologies and will be encouraged to clarify their own philosophical identities. Prerequisite: PHIL 201, 203, or 208, or permission of instructor. Limited to senior philosophy majors and minors.

402. Philosophy Tutorial.

Under faculty supervision, the student assists in the teaching of an elementary course in philosophy. Limited to majors.

468. SYE: Independent Study.

A one-semester SYE independent study option for students who are unable to complete an SYE in any other way. Students must complete an independent study project worthy of SYE designation under supervision of a faculty member. Prerequisite: permission of department chair.

#### 469. SYE: Independent Study: Metaphilosophy.

Occasionally a student who wishes to take Metaphilosophy as an SYE is unable to take the seminar version of this course (which is only offered in the spring), either because of graduating at the end of fall semester, or because of scheduling conflicts in the spring with another course required for graduation. In those cases, the student can take the Metaphilosophy course as an independent study under supervision of a faculty member. Prerequisite: permission of department chair.

#### 489,490. SYE: Research and Thesis.

Intended for students who are not eligible for honors but wish to fulfill their SYE requirement by completing a philosophy thesis during the senior year. In the fall, the student registers for 489 and conducts research under the supervision of a faculty member. In the spring, the student registers for 490 and develops a philosophical thesis and defends it in a departmental seminar. Students interested in this SYE option must submit a research proposal in the spring of their junior year; these proposals will be considered after honors proposals are evaluated. Limited to majors.

#### 498-499. SYE: Honors Research and Thesis.

Intended for students who are eligible for honors and wish to fulfill their SYE requirement by completing a philosophy thesis during the senior year. In the fall, the student registers for 498 and conducts research under the supervision of a faculty member. In the spring, the student registers for 499 and develops a philosophical thesis and defends it in a departmental seminar. Students interested in this SYE option must submit a research proposal in the spring of their junior year. Limited to majors.

## Physics

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Major and minor offered.

Visit the physics department webpage at <https://www.stlawu.edu/offices/physics>.

St. Lawrence offers interdisciplinary majors in biology–physics and geology–physics. For more information visit <https://www.stlawu.edu/offices/physics/biology-physics> or <https://www.stlawu.edu/offices/physics/geology-physics>.

## Major Requirements

The requirements for a major in physics total 11 course units, which include two half-unit courses, PHYS 317, 318, PHYS 151, 152, 221, 222, 307, 308, 333, 489 (or 498) and one additional full-unit at the 400 level make up the other ten course units. In preparation for senior-year research, we strongly recommend that physics majors take PHYS 452 in their junior year.

The three-course calculus sequence (MATH 135, 136, 205) should be completed as soon as possible. Since physics students make extensive use of computers, potential majors are advised to enroll in CS 140 during the sophomore year. Majors considering the possibility of graduate study in physics are strongly encouraged to take PHYS 401. Also recommended for the major are MATH 217 and 230 and CHEM 103 and 104.

## Honors

To qualify for honors, students must fulfill the following requirements:

1. A major in physics that includes at least three units of 400-level work in physics, not including units earned in the seminar series 451-454.
2. Submission for departmental evaluation of a copy of an independent project undertaken in the senior year.
3. A minimum grade point average of 3.5 over all courses in the major. (See Honors in the Curriculum chapter of this *Catalog*.)

## Minor Requirements

A minor in physics consists of PHYS 151, 152, 221, 222, plus one unit at the 300 level or above selected from the following courses: 307 or 333 or a combination of any two of 317, 318, and 452.

## Basic Engineering Combined Plan

Students in the engineering combined plan who choose physics as a major must complete eight course units in physics, which include two half-unit courses, PHYS 317 and 318. PHYS 151, 152, 221, 222, 307, 308 and 333 make up the remaining seven units. Other requirements for the engineering combined plan are given here: <https://www.stlawu.edu/offices/engineering-combined-programs>.

## Courses

### 102. Introduction to Astronomy. (*with lab*)

People of every time and culture have studied the skies, named the arrangements of stars and used the apparent motions of the sun and moon to mark time. This course, designed for the non-scientist, surveys the known contents of the universe and explores the dynamic natures of celestial objects through study of their motions, interactions and evolutions. To foster appreciation for the methods of science, naked-eye observations are required of each student and attention is given to Western culture's slow path toward understanding the cosmos and our place within it. Physics 102 is taught in studio format; lectures are combined with laboratory experiences, fostering interaction among the students and instructor. Major credit restricted.

### 103. College Physics. (*with lab* 1.25 units)

This course is the first of a two-semester sequence designed to provide a general survey of physics. It emphasizes the relationship between basic physical principles and observations, both in the laboratory and in everyday events around us. It covers topics in mechanics and wave phenomena. The mathematical level of presentation assumes elementary algebra and basic trigonometry. While it serves as the appropriate physics course for students in the life sciences, it is designed to be accessible to all who have an interest in the subject. There is one laboratory period per week in addition to class work. Offered Fall semester only.

104. College Physics. (*with lab* 1.25 units)

This course is the second of a two-semester sequence designed to provide a general survey of physics. It emphasizes the relationship between basic physical principles and observations, both in the laboratory and in everyday events around us. It covers topics in electricity and magnetism and modern physics. The mathematical level of presentation assumes elementary algebra and basic trigonometry. While it serves as the appropriate physics course for students in the life sciences, it is designed to be accessible to all who have an interest in the subject. There is one laboratory period per week in addition to class work. Prerequisite: PHYS 103 or 151. Offered Spring semester only.

105. Energy.

This course covers the nature of energy, its application in modern society and a variety of issues associated with that use. We will study the physical principles of mechanical, thermal, electrical, optical and nuclear energy in order to better understand the role of energy in society, focusing on fossil fuels, electric power plants, automobiles, global warming, the ozone layer and energy conservation, as well as nuclear, solar and other power sources. This course makes extensive use of elementary algebra and scientific notation. Major credit restricted.. *Also offered as ENVS 105.*

110. The Scientific Revolution.

This course covers the development of scientific thought in the period 1500 to 1725. It examines changing views of nature in the fields of anatomy and physiology, astronomy and physics. Although the primary focus is on specific scientific developments, they are discussed in the context of concurrent social, economic and religious changes. Major credit restricted. *Also offered as HIST 110 and through European Studies.*

112. Global Climate.

Climate is perhaps the single most important and pervasive factor controlling global ecosystems and human well-being. This interdisciplinary course examines global climate from a historical perspective, beginning with the formation of the solar system and continuing through geologic time to the present. Topics include the development of the atmosphere; the workings of the global heat engine of atmosphere, oceans and continents; evidence for past climate change; causes of global climate change; the effects of climate change on human evolution; and the effects of human evolution on the global climate system. This is a studio lab course. Major credit restricted. *Also offered as ENVS 112 and GEOL 112.*

151. University Physics. (*with lab* 1.25 units)

This course is the first of a two-semester sequence organized according to the major unifying principles of physics. It is a general study of conservation laws and Newtonian dynamics. The material is presented at the level of elementary calculus; some elementary computation techniques will also be introduced. There is one laboratory period per week in addition to class work. These courses are recommended for all students majoring in the physical sciences or completing the 3+2 engineering program. Co-requisite: MATH 135. Offered Fall semester only.

152. University Physics. (*with lab* 1.25 units)

This course is the second of a two-semester sequence organized according to the major unifying principles of physics. It is a general study of electricity and magnetism, relativity, and the quantum nature of light and matter. The material is presented at the level of elementary calculus. There is one laboratory period per week in addition to class work. These courses are recommended for all students majoring in the physical sciences or completing the 3+2 engineering program. A grade of 2.0 or higher in this course is required as a prerequisite for enrollment in PHYS 221. Co-requisite: MATH 136. Prerequisite: PHYS 103 or 151. Offered Spring semester only.

221. Modern Physics. (*with lab* 1.25 units)

This course is the first of a two-semester sequence providing a systematic study of the ideas and discoveries that transformed physics in the twentieth century. Topics in this course include special relativity, atomic structure, the wave-particle duality, and basic quantum mechanics. There is one laboratory per week in addition to class work. Prerequisites: MATH 136 and a grade of 2.0 or higher in PHYS 104 or 152. Offered Fall semester only.

222. Modern Physics. (*with lab* 1.25 units)

This course is the second of a two-semester sequence providing a systematic study of the ideas and discoveries that transformed physics in the twentieth century. Topics in this course include the quantum mechanical model of hydrogen, statistical mechanics, and applications such as solid-state physics, nuclear structure and reactions, and elementary particles. There is one laboratory per week in addition to class work. Prerequisites: MATH 205 and a grade of 2.0 or higher in PHYS 221. Offered Spring semester only.

307. Classical Mechanics.

The principles of Newtonian mechanics at the intermediate level; topics include the dynamics of particles and rigid bodies, resonance, rotating reference frames, planetary motion, wave motion and Lagrange's equations. Prerequisites: PHYS 152, MATH 205.

308. Electricity and Magnetism.

This course involves the study of electricity and magnetism leading to Maxwell's equations and physical optics. Prerequisites: PHYS 152, PHYS/MATH 333 or permission of instructor. Offered in even years in the spring semester.

317. Instrumentation Lab. (0.5 unit)

This course is designed to introduce students to a variety of instrumentation used in the physics lab. Computer techniques for acquiring data and controlling experiments are taught. A primary goal of this lab is to foster a spirit of independence in the student researcher. Each student must complete an independent project. Co-requisite: PHYS 307 or permission of instructor.

318. Electronics Lab. (0.5 unit)

This course is designed to teach basic electronics. Students learn enough in this course to put together simple circuits such as voltage dividers, filters and amplifiers. A primary goal of this lab is to foster a spirit of independence in the student researcher. Each student must complete an independent project. Prerequisites: PHYS 152 and MATH 136.

333. Mathematical Methods of Physics.

Important problems in the physical sciences and engineering often require powerful mathematical methods for their solution. This course provides an introduction to the formalism of these methods and emphasizes their application to problems drawn from diverse areas of classical and modern physics. Representative topics are selected from the areas of complex numbers, Taylor expansions, vector calculus, linear algebra, Fourier series, as well as techniques from the theory of ordinary and partial differential equations and the calculus of variations. The course also introduces students to computational methods as an aid in problem-solving and visualization. Prerequisites: MATH 205 and PHYS 152. Offered in fall semester. Also offered as MATH 333.

401, 402. Quantum Mechanics.

Intended for physics majors preparing for graduate study in physics and closely related areas, this course applies methods of advanced analysis to quantum mechanics and other topics. Prerequisite: PHYS 307, 308, 333 or permission of the department. PHYS 401 is offered in odd-numbered years in the spring. PHYS 402 is offered on demand.

403, 404. Topics in Advanced Physics.

Seminars, projects or participation in faculty research designed to meet individual needs of advanced students. Offered on demand. Prerequisite: PHYS 307, 308 or permission of the department.

451, 452, 453, 454. Seminar in Contemporary Physics. (0.5 unit each)

A weekly seminar in which students and faculty present reports derived from the physics literature on current research in physics. Representative topics are solar neutrinos, high-temperature superconductivity, the search for gravity waves and quantum chaos. Students are introduced to physics literature and data bases. Students will assemble a comprehensive literature review and research project proposal on a topic of their choice to be presented to the department at the end of the semester. Second semester juniors can use this course as an opportunity to select their senior research project. Up to four semesters of enrollment are permitted, at one-half course unit per semester. Prerequisite: PHYS 222 or permission of the instructor.

489, 490, 498, 499. SYE: Advanced Laboratory.

This course for physics majors consists of an individual project selected from an area of common interest between the student and one faculty member. A written report of the project is defended at an oral presentation. PHYS 498 and 499 are the honors versions of this course. Prerequisites or co-requisites: PHYS 308, 317 and 318, or permission of the department.

# Psychology

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Major and minor offered.

See also Environmental Studies-Psychology combined major.

Visit the psychology department webpage at <https://www.stlawu.edu/offices/psychology>.

## Major Requirements

The major in psychology requires a minimum of 9.75 units of credit: 8.75 units of psychology courses plus STAT 113. Required psychology courses are PSYC 101WL **or** 101NL **and** PSYC 205.

Six additional courses fulfill the minimum requirements for the major and must include at least one course from each of the following distribution themes: Biological/Evolutionary, Social/Cognitive, and Applied. At least one course must be a seminar or one of the independent project options offered. In addition, at least two courses must include a laboratory section after completing the research methods course. One of the laboratory courses must be from the Biological/Evolutionary theme and one must be from either the Social/Cognitive theme or the Applied theme. A single course may count toward both a distribution theme and the laboratory or seminar requirement.

## Honors

Honors are awarded on the basis of quality point standing in psychology (see Honors in the Curriculum section of this *Catalog*) and successful completion of PSYC 498 and 499 (SYE: Senior Project) with a grade of at least 3.5 in PSYC 498 and 499; an “X” grade may be given in PSYC 498. Two types of projects are acceptable for the senior project:

1. Independent research involving either basic or applied investigation.
2. Independent study involving integration and critical analysis of research and theory in a given area of psychology.

The following are required for successful completion of the senior project:

1. Apply for the SYE Senior Project during the semester prior to beginning the project.
2. Enroll in PSYC 498 and 499 (SYE: Senior Project) during the final two semesters on campus.
3. Give a preliminary presentation of the proposed project to the project committee during the first semester of the project. Students who have made sufficient progress will continue and enroll in PSYC 499 in their final semester.
4. Submit a written product and reflection to your project committee for feedback by the provided deadline in the second semester of the project. Give a formal colloquium or a poster or oral presentation at the Festival of Science on the completed project to the project committee.
5. After incorporating feedback from the project committee, submit the final written project paper and reflection.

## Minor Requirements

The minor in psychology requires a minimum of 7.5 units of credit: 6.5 units of psychology courses plus STAT 113. Required courses are PSYC 101WL *or* 101NL *and* PSYC 205.

Four additional courses fulfill the minimum requirements for the minor and must include at least one course from each of the distribution themes discussed above. At least one course must be a seminar or one of the independent project options offered by the Psychology Department. In addition, at least one course must include a laboratory section after completing the research methods course. A single course may count toward both a distribution theme and the laboratory or seminar requirement.

## Environmental Studies–Psychology Major

A combined environmental studies–psychology major is available. Please consult the Environmental Studies section of this *Catalog* for the complete list of courses.

## Other Important Information

PSYC 205: Research Methods and courses with laboratory at the 300- and 400-level are worth 1.25 units and must be taken at St. Lawrence. Some courses with a laboratory section can be taken without the laboratory. These courses are worth 1.0 unit and fulfill the same distribution theme as the course with lab.

To receive laboratory credit in a course, other than PSYC 101WL: Introductory Psychology, a student must earn a passing grade for both the laboratory and lecture components of the course. A failing grade for the laboratory component will result in the student being re-registered into a non-laboratory (lecture) section; the student will need to complete another course with laboratory to fulfill the requirement.

Once a student matriculates at St. Lawrence, only 1.0 unit of transfer credit taught by a non-St. Lawrence psychology professor may count toward the minimum number of required units in the major or minor. If a matriculated St. Lawrence student wishes to take a course at another college or university for transfer credit, the student and the department chair should agree in advance on the appropriateness of the course(s) and which of the requirements, if any, will be satisfied.

A transfer student and the student's advisor should confer with the department chair about the student's transferred psychology courses and which requirements remain to be filled.

Students earning a 4 or 5 on the advanced placement exam in Psychology may earn credit for PSYC 101NL: Introductory Psychology without lab and may enroll in an upper-level Psychology course.

A listing of courses currently taught on a regular basis by their distribution theme and seminar, independent project or lab designation can be found on the department website.

## Courses

101WL and 101NL. Introductory Psychology. (*with lab and without lab*)

This course surveys the scientific study of behavior and mental processes as natural phenomena. Basic psychological areas such as biopsychology, perception, learning, memory, motivation and emotion are typically addressed. Broader, integrated topics such as development, personality, and social and abnormal psychology are also explored. Students who enroll in 101WL gain additional focus on how psychologists formulate research questions, gather data and interpret findings based on the major conceptual approaches in the field of psychology. PSYC 101WL or 101NL is a prerequisite for all other courses and is also required for the neuroscience major.

3000-3999. Special Topics for Non-Majors.

These courses are offered occasionally in specific areas of psychology at an intermediate level between Psychology 101 and advanced-level courses. Topics and formats vary depending upon the instructor. The content of each course or section will be announced each semester. Prerequisite: PSYC 101WL or 101NL.

205. Research Methods in Psychology.

This course presents students with conceptual approaches and practical techniques for applying the scientific method to behavioral research. Students learn about observational, correlational and experimental research designs and have the opportunity to apply these designs in the laboratory while investigating relevant psychological phenomena. Appropriate statistical procedures and computer software are used to analyze the data from these labs; therefore, students must take a course in statistics prior to 205. This course also covers research ethics and emphasizes effective communication through scientific writing and oral communication. Counts toward the minors in public health and statistics and the neuroscience major (behavioral track). Prerequisites: PSYC 101WL or 101NL, an additional Psychology course at any level and STAT 113; or permission of the instructor.

207. Developmental Psychology.

This course is intended to describe and explain the changes in bodies, minds, and behavior of people that occur from conception until death. While emphasis is placed on the early years of most rapid change, appropriate topics are covered throughout the life span. This course explores physical, cognitive, and socioemotional milestones across the lifespan and theories about various kinds of development. Attention is also paid to factors that contribute to individual differences and atypical development. Prerequisite: PSYC 101WL or 101NL.

215. Cultural Psychology.

This course is designed to introduce students to current theories and research about the ways in which our sociocultural contexts influence human mind and behavior. Topics will highlight cultural similarities and differences in basic psychological processes, including human development, personality, motivation, cognition, emotion, health, morality, and social relationships. Students will also learn how to consider

issues of culture in interpretation of personal experience and in application of cultural diversity issues to various settings. Prerequisite: PSYC 101WL or 101NL. *Also offered through Peace Studies.*

232. Laboratory Animals: Ethics, Care and Techniques. (0.5 unit)

This half-unit course introduces students to the techniques, use and care of laboratory animals. Students gain knowledge and hands-on experience in the areas of anesthetics/analgesics, surgical techniques and proper animal handling and husbandry. Topics covering the ethical use of animals in research, appropriate and humane care, and the functions of regulatory agencies are covered. Concurrently, students explore the relationships between humans and animals used in teaching and research. Prerequisite: PSYC 101WL or 101NL or BIOL 101 or permission of instructor.

233. Neuroscience of Fear (*Summerterm study abroad*)

Brain structures that control the fear response are shared across humans, mammals, birds, and reptiles. These structures have been evolutionally preserved because fear helps to protect us from danger, injury, and death. Though the dangers of modern society differ substantially from those of our ancient past, aspects of our primal fear instincts remain. Are such emotions merely intrusions from another time or do they still have a function in our consciousness today? With a focus on the fear response, we will examine the evolutionary aspects of emotions, how they are displayed in infancy, develop over time, and tie into decision-making in our everyday lives. We will examine this issue from a multidisciplinary perspective, synthesizing recent work from the fields of biology, developmental psychology, neuroscience, and philosophy.

237. Psychology of Gender

This lecture course examines the complex role of social, cultural, psychological, evolutionary and biological processes involved in gender identity. By using an interdisciplinary approach, we will explore how gender identities are developed, expressed and perceived by others. Over the course of the semester, we will discuss a variety of topics and issues, including gender norms, gender as a social construct, trans and nonbinary gender identities, cultural differences in gender expression and expectations, prejudice and discrimination, mental and physical health outcomes related to gender, and intersections between race, gender, and sexuality. Our goal in this exploration will be to think critically about the influence of gender identity and gendered expectations on our everyday lived experiences, self-perceptions and relationships with others. Prerequisite: PSYC101WL or 101NL. Fulfills the DIV13 requirement. *Also offered as GNDR 237.*

238. Psychology and Law.

This course explores the contributions psychological science can make and has made to legal policy and the legal system through examination of several topics within the field of psychology and law. Students will also learn about legal concepts and the functioning of the legal system. Topics may include eyewitness identification, false confessions, policing, jury behavior, and the death penalty. Prerequisite: PSYC 101WL or 101NL.

253. Personality.

Personality theories provide a framework with which to understand a person's development, motivation, and behavior. This course examines traditional and contemporary theories of personality, focusing on representative theorists from the psychoanalytic, trait, behavioral, cognitive, and phenomenological approaches. Evaluation of theories on logical and empirical grounds is discussed.

Prerequisite: PSYC 101WL or 101NL.

256. Health Psychology.

Health psychology is an applied field devoted to understanding psychological influences on health and illness in our society. This course examines a variety of psychological, biological, sociocultural, and behavioral factors that affect our physical well-being. Topics include medical concerns ranging from cardiovascular disease to HIV/AIDS, and the implications of psychological health on physical functioning.

Prerequisites: PSYC 101WL or 101NL.

270. Introduction to Biological Psychology.

This course will introduce students with limited background in biology to the myriad of theories and research pertaining to the biological foundations of behavior and cognition. Using genetic, evolutionary, endocrine, and neuroscience perspectives, we will investigate the biological basis of perception, action, learning, memory, emotion, sleep, mating, health, language, personality, and mental health. We will also consider the ethical dilemmas surrounding the use and potential misuse of new genetic and neuroscientific biotechnologies to study and alter behavior in humans and other animals. Prerequisites: PSYC 101WL or 101NL or Instructor Permission.

313. Industrial/Organizational Psychology.

Designed to acquaint the student with major applications of psychological findings and techniques to problems of management and industry, this course includes human factors engineering, personnel procedures and organizational behavior. Prerequisite: PSYC 101WL or 101NL and STAT 113. *Also offered through Peace Studies.*

317. Abnormal Psychology.

This course is designed to study the major psychological disorders, and how stress plays a role in their appearance and severity. The course uses case histories, lecture, movie excerpts, discussion, and extensive use of primary literature to explore the latest thinking in how our biology, psychology, and social environment intertwine to create mental illness and mental health. Prerequisite: PSYC 101WL or 101NL and STAT 113.

318. Environmental Psychology. *(with lab)*

This lecture-laboratory course studies the relationships between humans and physical environments — both natural and built. Topics include environmental assessment, attitudes and behavior toward the environment and the psychological effects of such environmental factors as crowding, architectural design, extreme environments, pollution and natural disasters. The laboratory is required of all students.

Prerequisite: PSYC 101WL or 101NL; if taken for psychology credit, PSYC 205. *Also offered as ENVS 318 and through Peace Studies.*

322. Positive Psychology. *(with lab)*

While there is no shortage of lay theories and self-help literature that offer advice on how to achieve “the good life,” this lecture-laboratory course will examine the nature of positive emotions and well-being from the viewpoint of empirical psychology research. Recent empirical research will be reviewed, and students will apply the information in class discussion, written assignments, and hands-on experiences. By examining the relationship between happiness and such topics as life circumstances, character strengths, the conflicted mind, reciprocity, social relationships, trauma, and spirituality, we will understand and apply empirically-supported ideas for enhancing well-being. Prerequisite: PSYC 101WL or 101NL and PSYC 205. *Also offered through Peace Studies.*

325. Social Psychology. *(with lab)*

This lecture-laboratory course covers the theory and research of how individual humans think, feel, and behave when influenced by their social environment. Topics include the social self, thinking about people and situations, attributions, attitude formation and change, conformity, affiliation and attraction, altruism, aggression, prejudice and group dynamics. The laboratory is required of all students. Prerequisite: PSYC 101WL or 101NL and PSYC 205. *Also offered through Peace Studies.*

326. Hormones and Behavior. *(with lab and without lab)*

This lecture-laboratory course provides an introduction to the field of behavioral endocrinology. The interplay between hormones and behavior is explored by reviewing current knowledge derived from human and animal research in the field. Topics include the influence of hormones on reproductive behavior, parental behavior, aggression, sexual orientation, moods and emotions, psychiatric disorders and perceptual and cognitive abilities. Environmental and experiential influences on endocrine function are also examined. May be taken as an elective toward the neuroscience major (behavioral track) with permission of instructor. Prerequisites: PSYC 101WL or 101NL; if taken for laboratory credit, PSYC 205.

327. Sensation and Perception. *(with lab and without lab)*

This is a lecture-laboratory course that examines the ways in which humans experience the world around them through the sensory systems of vision, hearing, touch, smell, and taste. The course will emphasize cognitive and biological perspectives and includes topics such as color vision; depth, size, and object perception; sound localization; speech perception; and multisensory integration. Counts toward the neuroscience major (behavioral track). Prerequisite: PSYC 101WL or 101NL; if taken for laboratory credit, PSYC 205.

355. Sport Psychology. *(with lab and without lab)*

This lecture-laboratory course is designed to develop an understanding of human behavior and mental processes in sport and exercise settings. Topics examined include (a) psychosocial aspects (e.g., motivation, psychological responses to injury, aggression) involved in the sport training process and

competition among adults and youth at all skill levels; (b) psychological skills training for athletic performance (e.g., relaxation, self-talk); and (c) social influences (e.g., leadership, cohesion). Students who take the course with lab will have more opportunities for psychological skills training, data analysis techniques, and building critical thinking skills related to sport psychology. Prerequisite: PSYC- 101WL or PSYC-101NL; if taken for laboratory credit, PSYC-205.

#### 4000-4999. Special Topics for Majors & Minors

These courses cover special topics not regularly offered in the curriculum. The courses are designed for juniors and seniors and are taught in either a seminar or a regular class format, possibly with laboratory. The content of each course or section will be announced each semester. Prerequisite: PSYC 101WL or 101NL and sometimes PSYC 205; may be restricted to Psychology majors and minors.

#### 401. Learning and Behavior. *(with lab)*

A lecture-laboratory course covering the major psychological principles that underlie behavior and its modification through environmental manipulation. An emphasis is placed on the experimental analysis of human and non-human behavior. Topics include the theoretical and historical underpinnings of a science of behavior, classical and operant conditioning, aversive control, choice and preference, conditioned reinforcement, behavior modification, Applied Behavior Analysis, and advanced statistical data analysis. The lab component involves extensive work in and outside of class conducting research with rats. Counts toward the neuroscience major (behavioral track). Prerequisite: PSYC 101WL or 101NL and PSYC 205.

#### 402. Memory and Cognition. *(with lab and without lab)*

This lecture-laboratory course (can be taken with or without lab) offers a fairly comprehensive study of human cognition. In addition to extensive coverage of human memory, the course includes an analysis of major areas such as object perception, attention, knowledge, problem-solving, and decision-making." Where possible, students consider evidence that sheds light on the neural correlates of cognition, drawn mainly from the related disciplines of neuropsychology and cognitive neuroscience. In addition to providing an introduction to leading theories and empirical findings, the course also examines several applied domains, such as repressed and recovered memories and eyewitness testimony. Counts toward the neuroscience major (behavioral track). The lab emphasizes the use of classic and contemporary empirical techniques to understand the nature of mental representations that underlie various phenomena in the domains of basic and applied cognition. Prerequisites: PSYC 101WL or 101NL; if taken for laboratory credit, PSYC 205.

#### 413. Community Psychology.

This seminar with community-based learning (CBL) has two objectives: to provide an introduction to some basic issues, concepts and methods in community psychology, and to offer experiential learning through an internship placement in a community setting (approximately 80 hours over the course of the semester). Topics include the ecological perspective, stress and coping, and prevention and evaluation research. Possible CBL placements include Head Start, United Helpers nursing home, Reachout crisis hot line, the St. Lawrence Health Initiative (sexuality education), programs for individuals with intellectual

disabilities, and several different substance abuse-related programs/agencies. Students are required to communicate with the professor prior to registering, and generally, CBL placements are arranged with assistance from the instructor in the semester prior to enrollment. Prerequisites: PSYC 101WL or 101NL, PSYC 205, and permission of instructor.

432. Animal Behavior. (*with lab*)

This lecture-laboratory course examines various forms of behavior as they appear throughout the phylogenetic scale. The roles of evolution, genetics and the neural system in the control of diverse behaviors from feeding to territoriality and human aggression are considered. Counts toward the neuroscience major (behavioral track). Prerequisite: PSYC 101WL or 101NL and PSYC 205.

438. Human Neuropsychology.

This seminar course will examine the function of the human nervous system as it relates to cognition and behavior. Topics covered will include: language, attention, memory, motor skills, visual-spatial processing, problem solving, emotion, and consciousness. Special attention will be paid to the modern methodologies used to study brain-behavior interactions in normal and neuropathological populations. Lectures, discussions, and projects will make use of both empirical and clinical case materials. Prerequisites: BIOL/NRSCI 288. *Also offered as NRSCI 438.*

443. Introduction to Clinical Psychology.

This course examines the field of contemporary clinical psychology, focusing on the problems and procedures related to psychological diagnosis, the interaction between theory and practice, and important aspects of research in clinical populations. Prerequisites: PSYC 101WL or 101NL and PSYC 317.

459. Cognitive Science.

Analogies such as ‘the mind is a blank slate’ or ‘the brain is like a computer’ reflect different models of how humans acquire and process information. Cognitive science is the study of how the mind works from an interdisciplinary perspective. In this seminar, we will critically analyze theoretical approaches and scientific evidence related to human cognition through the lens of psychology, neuroscience, computer science, philosophy, anthropology, and linguistics. Topics include perception and action, learning, memory, decision-making, human-computer interaction, spatial cognition, development, language, and social cognition. Prerequisites: PSYC 101WL or 101NL and PSYC 205.

461. Psychological Science and Critical Thinking.

Do you know people who believe that: psychics can communicate with the dead, Bigfoot exists, homeopathic medicine is effective, houses can be haunted, people have been abducted by aliens, some folks are literally possessed by the devil, and vaccines are a cause of autism? In this seminar we will examine the evidence behind a variety of claims that generally fall under one or more of the overlapping headings of parapsychology, the paranormal, pseudoscience, or alternative medicine. More importantly, what psychological processes and statistical errors help us to understand the development of such

beliefs? Prerequisites: PSYC 101WL or 101NL, PSYC 205, and permission of the instructor. Interested students without the recommended background should see the instructor.

#### 465. Applied Behavior Analysis.

Over the last several decades, Applied Behavior Analysis, which uses learning principles to change behavior, has become the defining treatment for individuals with developmental and intellectual disabilities. Over the same period of time, though, behavior analytic principles have also been used to train giant rats to find land mines, get people to stop smoking and start exercising, and improve the welfare of zoo animals. In this seminar, we survey the empirical, theoretical, and methodological literature surrounding the application of basic research in behavior analysis to a range of socially significant problems. Topics include: developmental and intellectual disabilities, drug and alcohol abuse and treatment, animal training, zoo management, health and exercise, environmentally-conscious behavior, and safety-related behavior. Prerequisites: PSYC 101 WL or 101 NL and PSYC 205. Psychology and Neuroscience Majors or Minors only.

#### 467. Psychology of Human Sexuality.

This seminar course examines human sexual and gender identities, with an emphasis on those within the LGBTQ+ community. By using a biopsychosocial framework, we will explore how these identities are developed, expressed, and perceived by others. Importantly, while we will spend some time investigating research on the biological determinants of gender and sexuality, this course will emphasize the social and cultural factors surrounding these identities. Over the course of the semester, we will discuss a variety of topics and issues, including: queer and trans identities, essentialism vs. identity fluidity/flexibility, intersectional identities, sex positivity and sexual behaviors, body positivity and physical diversity, social perceptions, prejudice and discrimination, and mental and physical health outcomes related to minority stress. Prerequisites: PSYC 101 WL or 101 NL, PSYC 205. Psychology or Neuroscience Majors or Minors Only. Fulfills the DIV13 requirement.

#### 471,472. Independent Study in Psychology.

This course offers students the opportunity to engage in in-depth documentary investigation of a particular topic in psychology. Prerequisites: PSYC 101WL or 101NL and permission of instructor.

#### 496, 497. Independent Research in Psychology.

This course offers students the opportunity to engage in empirical and/or experimental research in psychology. Prerequisites: PSYC 101WL or 101NL, PSYC 205, and permission of instructor.

#### 498, 499. SYE: Senior Project.

In this two-semester capstone course, students integrate acquired research skills and/or subject knowledge. Students are credited with 1.0 unit in 498 and 1.0 unit in 499. Requirements include an application submitted the semester before enrolling in the project, a proposal presentation to members of the project committee by the end of the first semester, a final colloquium on the project and/or a poster or oral presentation at the annual Festival of Science, and a final written paper to be bound and

filed with the department, the project supervisor, and the library. In order to continue to PSYC 499, students must demonstrate adequate progress to their project committee by the end of the first semester of the project. Prerequisites: PSYC 101WL or 101NL, PSYC 205, senior status, and permission of instructor.

## Public Health

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Major and minor offered.

### Major Requirements

The public health major consists of 14 units, including six core public health courses, six from cross-listed electives addressing global and cross-cultural, critical humanistic, and scientific perspectives on health, STAT 113, and one unit of public health-related courses.

#### Core Courses

The core courses provide students with foundational knowledge of public health. 6 units.

- 1 unit PH 216. Introduction to Public Health
- 1 unit Introduction to Global and Cross-Cultural Health
  - ANTH 3072. Medicines and Meanings (CBL);
  - HIST/AFS 294. Medicine and Empire: Global Health in Historical Perspective;
  - GS 264. Global Public Health: Critical Perspectives (prereq: GS 101 or GS 102)
- 1 unit PH 3009. Introduction to the Health Humanities
- 1 unit PH 3001. Basic Principles of Epidemiology (pre-reqs: STAT 113 and PH 216)
- 1 unit PH 3013. Public Health Research Methods (pre-reqs: PH 216)
- 1 unit PH 4001. Social Determinants of Health (prereq: PH 216)

#### Cross-Listed Electives

6 units, at least one from each of the following 3 areas, drawn from at least 3 departments.

- Global and Cross-Cultural Perspectives on Health - These courses require students to take a cross-cultural perspective on health and public health interventions, examining relations of power and structures of inequality operating at local and global scales.
- Critical Humanistic Perspectives on Health - These courses draw from the humanities, arts, and humanistic social sciences, requiring students to uncover and analyze diverse conceptions of health, illness, and the body and situate them in their social, cultural, and historical contexts.
- Scientific Perspectives on Health - These courses explore the scientific basis of illness, health, and well-being at the intersection of the mind, body, and environment.

#### Additional Requirements

- 1 unit STAT 113. Applied Statistics
- 1 additional unit of public health-related courses (e.g., another Global/Humanistic/Scientific Elective, GEOL 233. Geographic Info Systems, independent study, SYE)

## Experiential Learning Component (ELC)

The public health major requires students to carry out an experiential learning component (ELC). The ELC will provide students with an opportunity to gain public health experience that complements their coursework. Unless the experience is pre-approved, students should receive approval in advance by the Chair of the Public Health Department. Majors must complete at least one of the following experiential learning options:

- Take a pre-approved Community-Based Learning (CBL) course with a public health placement.
- Carry out public health-related research (summer or semester).
- Complete an internship relevant to public health.
- Complete an internship, research, or community-based component relevant to public health as part of an off-campus program. No additional credit is necessary to fulfill the ELC requirement. Can be fulfilled with existing requirements or with another public health-related experience. It can be fulfilled with opportunities listed above or with an alternative public health-related experience. Alternatives must be approved in advance by the Chair of the Public Health Department. Alternative experiences should typically involve a minimum of 50 cumulative hours and be at least six weeks in duration.

Students are required to write an **ELC Reflection Statement** (400-500 words) on how the ELC relates to at least two PH Learning Goals (on the website) after completion of the experience. Students who fulfill the ELC with a pre-approved CBL course do not have to submit an ELC Reflection Statement.

Restrictions for the major:

1. A maximum of two courses at the 100-level can be counted toward the major.
2. No more than two approved courses from other institutions or University-approved study abroad/off-campus programs may transfer into your major. Permission from Chair of the Public Health Department is required for transfer.
3. All courses, except STAT 113, taken from other institutions or off-campus programs can only count as electives for the major.

## Minor Requirements

The **public health minor** consists of 6 units in three areas including two introductory public health core courses, one advanced public health core course, and three electives.

Two introductory core courses:

- PH 216. Introduction to Public Health AND
- PH 3009. Introduction to the Health Humanities OR
- A course in Global and Cross-Cultural Health:
  - ANTH 3072. Medicines and Meanings (CBL);
  - HIST/AFS 294. Medicine and Empire: Global Health in Historical Perspective;
  - GS 264. Global Public Health: Critical Perspectives (prereq: GS 101 or GS 102)

One advanced core course:

- PH 3001. Basic Principles of Epidemiology (prereqs: PH 216 and Stats 113) OR
- PH 4001. Social Determinants of Health (prereq: PH 216).

**Three electives from at least two different pools.** Core courses that are not chosen as required courses can be taken as electives.

- Global and Cross-Cultural Perspectives on Health.
- Critical Humanistic Perspectives on Health.
- Scientific Perspectives on Health.

**Final Minor Reflection Statement:** Students are required to submit a 1-2 page final reflection statement evaluating their work in the public health minor including how the courses taken fit together to create an integrated study of public health. Students should also describe which two of the Learning Goals listed on the PH website were most relevant to their experience. The statement must be done after all courses for the minor have been completed or are in progress for completion and prior to graduation.

Restrictions for the minor:

1. A maximum of two courses at the 100-level can be counted toward the major.
2. No more than two approved courses from other institutions or University-approved study abroad/off-campus programs may transfer into your major. Permission from Chair of the Public Health Department is required for transfer.
3. All courses taken from other institutions or off-campus programs can only count as electives for the major.

## Courses

See departmental listings for non-Public Health course descriptions and any prerequisites.

PH 216. Intro to Public Health.

The field of Public Health integrates knowledge of biology, human behavior, and social constructs with problem-solving strategies to address issues of disease facing distinct populations. This course will provide an introduction to principles of public health and epidemiology, social determinants of health, the biological basis of the most prevalent communicable and non-communicable diseases, as well as an exploration of global public health issues. Students will utilize this knowledge in a final project to identify and characterize a local public health issue, followed by developing an appropriate intervention or prevention plan.

PH 3009. Introduction to the Health Humanities.

In an article in the Times Higher Education, entitled 'A Humanist is Crucial when Fever is Raging', Prof. Robert Peckham of the University of Hong Kong talks about the coronavirus epidemics and argued that 'The humanities vanish from view at the very moment they are most required. So many facets of the coronavirus outbreak lie beyond the technical scope of biomedicine (...). An interdisciplinary approach focused on the big picture is urgently required to make sense of biomedicine's worldliness and disease's entanglement with social and political processes.' Such an approach would reorient medical concerns 'towards the vital socio-economic and cultural issues that impinge on health and well-being: inequality, poverty and discrimination.' Prof. Peckham underlines the importance of Health Humanities in the treatment of an epidemic such as the coronavirus. In this class, students will reflect on Health Humanities as a critical humanistic perspective, and will decenter the dominant narrative through which

we understand health and what it means to be 'healthy' by discussing health and theories of care in the Francophone World. Can also be taken as a Critical Humanistic Perspectives elective for the PH major/minor.

ANTH 3072. Medicines and Meanings.

Can also be taken as a Global and Cross-Cultural Perspectives elective for the PH major/minor.

GS 264. Global Public Health: Critical Approaches.

Can also be taken as a Global and Cross-Cultural Perspectives elective for the PH major/minor.

PH 3001. Basic Principles of Epidemiology.

As the basic science of public health, this course examines the causes and distribution of population health and the foundations of epidemiologic study design and basic analysis. This course also explores the issues relating to the impact and burden of chronic and infectious disease, specifically how disease disproportionately affects marginalized and underrepresented populations.

PH 3013. Public Health Research Methods.

Public health is about what makes us sick, what keeps us healthy and what we can do at a group level about it. Thus, public health is working to protect the environment, identifying, and controlling sources of illness, considering the impacts on the health of economic, ethnic and class differences, developing interventions to promote healthy lifestyles and behaviors, and producing health policies and legislation that benefit the public health. The goal of this course is to cover a diverse array of research designs and methods for contemporary public health practice including, but not limited to, experimental designs, public health surveillance designs, and case-control/cohort studies. Students will learn how both quantitative and qualitative research methods are used to better understand how demographic and structural variables contribute to population health outcomes.

PH 4001. Social Determinants of Health.

Serving as the "anchor" of the public health major, this course examines, in-depth, how some of the critical social determinants of health, such as race, gender, poverty, and geography impact health outcomes. HIST/AFS 294: Medicine and Empire. Can also be taken as a Global and Cross-cultural elective for the PH major/minor.

STAT 113. Applied Statistics.

PH 290. Independent Study. (0.5 unit)

Open to students who wish to pursue more specialized or advanced study, fieldwork and research with a faculty mentor. Prerequisite: PH 216. Permission of instructor is required.

PH 390. Independent Study. (1 unit)

Open to students who wish to pursue more specialized or advanced study, fieldwork and research with a faculty mentor. Prerequisite: PH 216 and one additional PH course. Permission of instructor is required.

PH 489/490. SYE Independent Study.

This requires completion of an individual research project mentored by Public Health faculty. This is a one-semester project (Fall or Spring). Before registering, students should work with a faculty mentor to prepare a research proposal outlining the intended thesis, theoretical framework, methodology and ethical considerations. The proposal should be submitted to the Public Health Department for approval during the semester prior to the project's start. Prerequisites: PH 216: Introduction to Public Health, PH 3013: Public Health Research Methods, and one other 300-level PH course. Permission of instructor required.

PH 495/496. SYE Honors in Public Health.

This requires completion of an individual research project mentored by Public Health faculty. This is a two-semester project. Students need to register for both 495 (fall) and 496 (spring). Honors will be granted to students who have completed and defended a thesis before a departmental committee. Prerequisites: 3.5 major GPA, PH 216, PH 3013, and one other 300-level PH course. Before registering, students should work with a faculty mentor to prepare a research proposal outlining the intended thesis, theoretical framework, methodology and ethical considerations. The proposal should be submitted to the Public Health Department for approval during the semester prior to the project's start. Permission of instructor required.

### **Global and Cross-Cultural Perspectives on Health**

ANTH 3072CBL. Medicines and Meanings

BIOL 412/GS 412. Cross-Cultural Healing.

FR 3047/AFS 3045/ ENG 3064. Zombies, Epidemics and Illnesses in the Francophone World.

GS 264. Global Public Health: Critical Approaches.

GS 3058. Gender, Race and Class in Health Policy in the US and Canada.

GS 365. Rethinking Population, Health and Environment.

PH 3002. Health Behavior and Promotion.

This course provides an overview of the field of health behavior and promotion, including an introduction to critical theories and methods. Using a 'socioecological view' of health, we will examine how biology (genetics), behavior, environment, culture, and social determinants affect individual behavior and population health. This course will introduce theoretical concepts of health behavior (e.g., health belief model, theory of planned behavior) and their role in public health problems and community-based approaches to health promotion.

### **Critical Humanistic Perspectives on Health**

- ANTH 4020. Anthropology of the Body.
- EDUC 325. Sexuality Education.
- EDUC 4014. Great (S)expectations.
- ENG 3076. The Cyborg in Literature and Film.
- FRPG 2181. Health, Disease, and Death.
- GS 268. Global Health and Justice.
- PCA 335. Sex Talk.
- PCA 343. Taboo Performances.
- PCA 370. Against Health: Rhetoric & the Health Humanities.
- PH 3009. Introduction to the Health Humanities.
- PHIL 354. Bioethics w/CBL.
- REL 3024. Women, Religion, and Food.

### **Scientific Perspectives on Health**

- ANTH 270. Plagues and Peoples.
- ANTH 4024. Paleoepidemiology.
- BIOL 258. Ethnobotany.
- BIOL 315. Human Nutrition.
- BIOL 370. Hormones, Disease and Development.
- BIOL/NRSCI 388. Drugs and the Brain w/ Lab.
- CHEM 306. Environmental Chemistry and Toxicology w/ Lab.
- ENVS 3074. Intro to Environmental and Occupational Health.
- GEOL 110. Environmental Geology.
- PH3001. Basic Principles of Epidemiology.
- PH4001. Social Determinants of Health.

PH/ENVS 4041. Issues in Environmental Health.

This course explores environmental risk factors and the physical well-being of individuals and vulnerable populations. You will study a range of interactions between humans and the environment that contribute to human and ecological health problems. Topics include risk factors and hazards in food production, waste systems, infrastructure, air and water quality, lifestyle, poverty, and energy production. This course provides an interdisciplinary approach to understanding environmental public health. You will read and discuss personal environmental health stories from books such as: *Living Downstream*, *Child of the Dark*, and *Swimming to Antarctica*.

### PH/ENVS 4042. Taming Trash.

A rapid rise in global consumerism and waste generation (+70% by 2050) is straining air, water, and climate systems. In this class, you will explore policies, technologies, and design approaches to reducing waste's impact. You will visit innovative waste management sites and use predictive tools to assess energy from waste and identify best practices. You will be challenged to consider the best approach to achieving sustainable waste systems, perhaps even zero waste scenarios. This course includes a weekly lab on eight occasions with field trips, gas modelling, and food waste data studies.

PSYC 237.	Psychology of Gender
PSYC 256.	Health Psychology.
PSYC 413.	Community Psychology w/ CBL.
PSYC 465.	Applied Behavior Analysis Seminar.
PSYC 4021.	Determinants of Well-Being.
SOC 275.	Medical Sociology.
SOC225.	Women's Health and Aging.
SOC 246.	Aging and Society w/ CBL.

## Religious Studies

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Major and minor offered.

See also Asian Studies.

Visit the religious studies webpage at <https://www.stlawu.edu/offices/religious-studies>.

### Major Requirements

Ten units are required within the field of religious studies. With the permission of the department chair, certain courses outside the department may also count toward the major.

#### Required Courses:

1. REL 200, Explaining Religion (ideally taken in the sophomore year).
2. Three 200-level survey courses, no more than two of which may be from the same religious world. A religious world is defined as one where different religious traditions have had longstanding historical contacts, and share or have been extensively influenced by each other's texts, doctrines, religious founders, ritual practices, myths and ethical systems. Students should consult with their advisor about completing this requirement. Courses include the following: 221, 222, 223, 224, 225, 226, 227, 231, 242, 281, and 288.
3. Religious Studies 360: Majors Seminar (ideally taken in the spring semester of the junior year).
4. One course at the 300-level (excluding 360). This class may not be taken off campus. Courses include 307, 331, 334, and 335.

5. Four elective courses. No more than one of the department's 100-level course offerings may be counted to fulfill this requirement. The other courses must be at the 200-level or above.
6. Optional Senior-Year Experience (489/490). This is a one-semester independent research project in which seniors explore a theme or topic of their choice with a faculty member of the department, preferably in the second semester of their senior year. The Senior-Year Experience will count as one of the "four elective courses" in number 5 above.

## Honors (498, 499)

To receive honors in religious studies, a student must satisfy the requirements for the major and, in addition, must meet the following two requirements: (1) a 3.5 cumulative GPA in the department, and (2) a departmentally-approved honors project taken as REL 498 and 499. See also Honors in the Curriculum section of this Catalog.

## Minor Requirements

A minor consists of five courses in religious studies: REL 100 or REL 200, two courses drawn from different religious worlds (see number 2, above), and two other courses of the student's choice, only one of which may be a 100-level course.

The following courses may be counted as electives for the major and minor in Religious Studies:

ANTH 340. Myth, Magic, and Ritual  
AAH 202. Art Italian Renaissance  
AAH 204. Baroque Art  
AAH 203. Art of the Northern Renaissance  
AAH 206. Art of the Middle Ages  
AAH 212. Icons of Islamic Architecture  
AAH 217. Buddhist Art and Ritual  
AAH 218. Arts of South Asia  
AAH 319. Gender Issues in Asian Art  
ENG 152. Intro-Greek & Roman Mythology  
ENG 253. The Aftermath of Troy  
ENG-225. English Literature I  
ENG 316. Medieval Drama  
ENG 4024. The House of Cadmus in Greek & Roman Mythology  
HIST 209. Medieval Europe  
HIST 210. Renaissance and Reformation  
HIST 229. Introduction to Native American History  
HIST 267. The Holocaust

PCA 322. Native American Oral Traditions.

PCA 330. Ritual Studies.

PHIL 103. Philosophy East and West

PHIL 120. Introduction to Peace Studies

PHIL 223. Asian Philosophy

## Courses

### Introductory

100. Mystery and Meaning: An Introduction to the Study of Religion.

What is religion? Why are people religious? What power does religion have for individuals and societies? How does religion function as a way of knowing, acting, and being in the world? How did the study of religion arise in the modern West, and how scholars of religion go about studying it? What ways have they devised to grasp the rich varieties of religious experiences and expressions that they classify as religions? Throughout the course, students will study a wealth of material that may be regarded as religious, from societies past and present, literate and non-literate, and from around the globe. Finally, students will reflect on the place of the religious in contemporary society. Offered each semester.

2000-2999. Religion in the World.

These 100-level thematic courses are designed to introduce the fascinating interdisciplinary field of religious studies. Each course examines a particular theme or topic, highlighting a key interpretive approach or approaches for understanding religion. Courses highlight the diverse academic strengths of the department's instructors.

101. Sacred Cinema.

Films often wrestle with profoundly spiritual issues and questions: Is there a god(s)? What is life all about? Who am I? Is there a way that a person (society) ought to live that is existentially real, true and meaningful? This course explores three types of American popular film dealing with religion: (1) Films that revision traditional religion to make it relevant for a contemporary audience; (2) films that are not explicitly religious (with no obvious symbols, personages, sacred histories in the plot) but nonetheless explore themes and questions that are central to religion; (3) the religious documentary.

103. Religion and Ecology.

How does religion shape human understanding of, and participation in, ecological systems? This course samples widely from a range of religious traditions to come to a better understanding of the diverse ways that people have developed for interacting with animals, plants, water and the land, and how those behaviors work in tandem with systems of knowledge and practice. The class has a substantial focus on environmental ethics, and thinks hard about how different religious systems might contribute to either or both environmental degradation and solutions to environmental problems. Traditions

sampled may include Islam, Christianity, Hinduism, Daoism, Judaism, Buddhism, Native American religions and Wicca/Neo-Paganism. *Also offered as ASIA 105 and ENVS 103.*

#### 105. Religion and Power

This introduction to religion focuses the many lenses through which we can study the diverse and complex human phenomenon we call “religion.” The course is divided into two connected halves, both of which consider the dynamics of power in the study of religion. During the first half, we will explore various approaches and themes in Religious Studies, connecting these to representations in popular culture. What is the definition of religion? What is its function? What is the connection between belief and action? Is religion opposed to science? Is religion violent or peaceful? In the second half of the semester, we focus on religion and power through an intersectional analysis of race, gender, sexuality, and disability.

#### 106. Introduction to Religion and Politics

Like any introductory course on the study of religion, this course aims to familiarize students with methodologies used in the study of religion. In this course, however, we will focus on how we might think about the study of religion in relation to political issues. We will first think about how to define “religion” and the equally difficult task of defining “politics.” Then we will apply these lessons to real-life situations, like deciding what religions are worthy of protection under the law in a given context. We will also look at religion and politics in the context of climate change and other ecological concerns. In the last section of the course, we will consider the broader social significance of religious and political concepts mediated to us through popular media—e.g., horror movies, Reggae music, and comics.

#### 200. Explaining Religion.

Why are people religious? This seminar explores both classic and modern interpretations of what religion is, does, and means. The course places emphasis on introducing basic methodological and theoretical tools for the study of religions and their intellectual historical background. This entails exploring a selection of readings that have been and are influential in religious studies, drawn from diverse academic disciplines. The course considers basic methodological approaches for understanding religion as a human construction, offers a general picture of the field of religious studies as a whole, and provides basic research skills that will develop students’ abilities to do independent research. Offered every fall.

### **Texts**

#### 205. Hebrew Bible: Plagues, Promises, and Prophecy.

**SPEAKING INTENSIVE** The legends, myths, historiography, prophecy, and poetry of the Hebrew Bible recount the history of a people caught between global superpowers of the second and first millennia BCE. They also recorded proclamations of justice in the face of injustice, the redemption of the oppressed, and the power of their god. Plagues were promised to the wicked and healing for the righteous. No prior knowledge of the Bible, Judaism, or Christianity is required. Indeed, students should not expect the Bible to be read as a devotional text, but rather consider how the Bible has been read, understood, and deployed in its ancient and modern contexts. Fulfills HU Distribution (2013 curriculum).

Cross-listed with HIST. Speaking Intensive. HU Distribution (2013 curriculum). Counts as an elective for public health minor.

206. New Testament.

In ancient Palestine, Jesus of Nazareth, a Jewish peasant from the backwaters of the Roman Empire, was put to death as an insurrectionist. His followers perceived that his life, death, and resurrection held significance on a cosmic scale. The New Testament focuses on critical and contextual reading skills in ancient and modern contexts. No prior knowledge of the Bible or Christianity is required. Indeed, students should not expect the Bible to be read as a devotional text, but rather consider how the Bible has been read, understood, and deployed in its ancient and modern contexts. Major assignments will ask students to design an Instagram feed for the Apostle Paul and to pitch one of the Gospels as the next viral Netflix hit. Also offered through European Studies.

242. Norse Mythology

This course is an introduction to the pre-Christian religion of Scandinavia. Beginning with an introduction to pagan sources outside of Scandinavia, the course examines the major sources for Old Norse mythology. We will discuss Christian influence and the ongoing expression of myth in a Christian context. The course ends with some consideration of the continuing reinterpretations and adaptations of Norse mythology in cultural expressions such as Wagner's Ring cycle and Marvel's Thor.

282. Love, War, and Hindu Myth: Ramayana.

For centuries, the Ramayana has figured heavily in religious imaginations across South and Southeast Asia. This course explores the telling and retelling of the story of Rama: a god born as a human prince, who is exiled to the forest for 14 years, and who enlists the aid of an army of monkeys to wage a war against a demon king and rescue his kidnapped his wife. We begin by studying one of the earliest renditions of the story in Sanskrit, addressing questions about its composition, narrative structure, and themes. We will then explore premodern and early modern vernacular renditions - in Tamil, Avadhi, Bengali, Persian, and Thai. The course culminates in modern, and often transnational, re-imaginings. In each case, we will examine the religious, social, and political conditions that prompted the retellings. Special attention will be paid to how these epics are represented in different mediums: art, dance, literature, film, and comics/graphic novels. Fulfills the HU distribution. *Also offered in Asian Studies and Global Studies.*

283. Love, War, and Hindu Myth: Mahabharata.

About ten times the length of the Odyssey and the Illiad combined, the Mahabharata is a compendious ancient epic. We will familiarize ourselves with the complex narrative that has captivated South Asians for over 2,000 years: 100 babies gestating in earthen pots; a queen who inexplicably drowns her newborn children; a king who loses everything in a game of dice; the manifestation of the divine in the middle of a battlefield; a cataclysmic war between feuding cousins. We will pay close attention to the multiple registers through which the text is refracted: the social, the historical, the political, the sacred. The course culminates in an examination of the life of the Mahabharata in classical and contemporary times, focusing on how it is retold in diverse mediums: art, dance, literature, film, and comics/graphic novels. Fulfills the HU distribution. Also offered in Asian Studies and Global Studies.

## Surveys of Religious Worlds

### 221. Religions of South Asia.

This course introduces the history and diversity of some of the major religions of South Asia, including Hinduism, Buddhism, and Islam. It considers religious ideas and practices that both define and dissolve the boundaries between these traditions, including techniques of bodily and spiritual perfection, visual and auditory practices, and inter-religious interactions. We will draw upon a broad range of literary, philosophical, historical, and ethnographic sources to gain a nuanced understanding of these religious traditions and the historical and cultural contexts in which they developed. Fulfills HU distribution (2013 curriculum). Fulfills DIV13 requirement. Also offered in Asian Studies.

### 222. Buddhist Religious Traditions.

This course offers an introduction of Buddhism from its genesis in India to Buddhism important role as a global religion today. Topics include the basic teachings and practices of early Buddhism in India in the sixth to fifth centuries BCE, the development of sophisticated philosophical teachings, meditational techniques and religious practices, lay and monastic life that arise with the historical spread of Buddhism into Sri Lanka, Southeast Asia, Tibet, China, Japan and, more recently, the West. Offered every other year. *Also offered in Asian Studies.*

### 223. The Religious Life of China.

This course surveys China's unique religious heritage through a selective survey of major thinkers, texts and cultural expressions. The primary emphasis is on the historical development and mutual influence of the "three teachings" — Confucianism, Daoism and Buddhism — with special attention given to the relationship between philosophy and popular practice, and to the interaction among political and religious institutions. Topics include gods and the sacred, ritual, ethics, human nature, meditation, mysticism and salvation. Offered every other year. *Also offered as ASIA 223.*

### 224. Islamic Religious Traditions.

An introductory examination of that religious tradition which, originating in seventh-century Arabia under the inspiration of the Prophet Muhammad, has come to include one-fourth of humankind, and predominates throughout the Middle East, North and East Africa, Pakistan, portions of India and Indonesia. The course considers the career of the Prophet and the growth of the central institutions of Islamic civilization and endeavors to identify the varied aspirations and concerns of Muslims in the contemporary world. *Also offered in Asian Studies.*

### 225. Religious Traditions of Judaism.

An introductory examination of the religious traditions of Judaism from the biblical period through the 21st century. Just as Christianity is no longer the religion of the Hebrew Bible, neither is Judaism. Emphasis is placed on the development of Rabbinic (modern) Judaism and its evolution in the modern world. The course also covers recent movements and events such as the emergence of new forms of Judaism, Zionism, the Holocaust and the birth of Israel.

226. The Religious Life of Japan.

At the Far Eastern end of Asia, Japan has benefitted over the centuries from a complex inter-mingling of indigenous and foreign traditions that gave rise to Japan's unique religious heritage. Students will learn about the different ways of being religious from pre-history to modern times through studying the ways of the kami, religion and the arts (for example, the tea ceremony), Pure Land and Zen Buddhism, State Shinto, new religious movements, and spirituality in contemporary Japanese popular culture. *Also offered in Asian Studies.*

227. Religion in Ancient Greece and Rome.

This course is an exploration of the development and evolution of religion in the worlds of ancient Greece and Rome. We first study the religious systems of each, and then examine how these systems affected each other and how each coped with systems that infiltrated from other regions. Finally, we examine the effect that the religious assumptions of the Greco-Roman world had on Judaism and Christianity (which were but two options among many) and the benefits that all of these systems offered to potential adherents.

231. Christian Religious Traditions.

A survey of the development of Christian traditions from the first century to the present. This course focuses on the historical development of what came to be called Christianity, the diversity of the traditions, and the eventual establishment of what we now think of orthodox Christian positions on issues like the divinity of Jesus and salvation. This course also focuses on key issues of gender, women's place in Christianity, and church-state relations. Special attention is given to the diversity of beliefs and practices in what we usually imagine as a monolithic tradition. Offered annually.

281. American Religious Lives

In this course we will look at the diversity of religions practiced in America to think about what that diversity means for understanding the range of human religious experiences. We will also discuss religious diversity's perennial challenge to Americans' conceptions of equality and inclusiveness, and how recognition of a tradition as a religion is often implicated in one's access to legal protections and civil rights. Of particular interest in this class is the significance of American religions in the construction, maintenance, and frequent re-formation of identities, principally as it pertains to notions of community, race, ethnicity, gender, sexuality, and class. Important to this course is also the effort to understand our own identity formations in relation to the powerful impact that religions and debates about the role of religion in American life has had on us, even when we were not aware of it, or even if we are not originally from the United States. Fulfills HU Distribution (2013 curriculum). Fulfills DIV13 Distribution (2013 curriculum).

288. Cults and New Religious Movements.

The rise of new religious and spiritual movements (NRMs) in North America since the 1960s is a response to the rapidly changing religious, social and political conditions of the modern world. The objective of this course is to explore the origins, nature, beliefs and practices of NRMs. Who joins these

groups and why? Do NRMs “brainwash” their followers? Are NRMs dangerous and violent? How have NRMs been portrayed in the mass media and in particular, by the news media?

## Topical Courses

### 201. Yoga Transformations

Exercise. Health. Wellness. Mindfulness. Relaxation. These are the words that come to mind when thinking about practices of Yoga, Tantra, and Ayurveda. Millions of Americans spend billions of dollars a year taking classes and buying apparel. Even in Canton, there are multiple places offering Yoga classes. While this course has a small experiential component, this is predominantly not a class where you will \*do\* yoga. Rather, we will examine the historical development of Yoga traditions, from their earliest expressions in premodern India to transformations in the present day. We will explore the connections and ruptures between contemporary practices and ancient texts. We will interrogate the shifting ways people have thought of the connections between health, spirituality, and religion. This interrogation is historically situated - examining how these concepts were considered in a premodern Indian context, and then how they develop against the backdrop of colonialism, capitalism, and globalization. Fulfills HU distribution.

### 218. Fantasy Religion.

Animated films or anime in Japan are a fascinating part of pop culture that attracts a huge audience of fans. As part of a global leisure industry, anime can offer an imaginary space not only to entertain, but to explore key questions about spirituality, religion, and the sacred. By viewing anime like Anno Hideaki's *Neon Genesis Evangelion*, Shiro Masume's *Ghost in the Shell*, and Miyazaki Hayao's *My Neighbor Totoro*, this class will explore topics as the nature of the gods (kami), Shinto as nature religion, Christianity Japanese style, apocalyptic (end of the world) themes in anime, evil and the demonic, and so on.

### 238. Global Christianities.

This course provides an introduction to and exploration of Christian traditions of non-Europeans. In the course we will initially explore the complexity and diversity of early Christianities, especially as they emerged in places like Ethiopia, where Christianity took on explicitly different forms of doctrine and practice. We will then look to South Korean churches as they have become one of the dominant missionary presences in Asia today to understand how Christianity is certainly no longer, though it perhaps never was, a purely European affair. We will also look to contemporary Native American Christianities to understand how populations who have experienced violent colonialism as they were being introduced to Christian traditions are speaking as leaders in traditions that have historically seen them as “a perpetual mission field” rather than full participants. Later in the semester we will focus on migrant and refugee populations and the role interpretations of Christian traditions play in the trauma they experience, and how other interpretations of Christian traditions became a means through which some of them might find empowerment and agency to resist the violence perpetrated against them. *Also offered in Global Studies and Caribbean, Latin American, and Latino Studies.*

### 245. Medieval Christianity.

Approximately half the history of Christianity is medieval Christianity, from the fall of Rome to the Reformation. This course surveys that period of history, with particular attention given to changes in

monasticism, heresy, the papacy, and popular Christianity. For popular Christianity, topics will include veneration of saints and their relics, stories of the Grail, and the sacraments. Also included are major shifts in devotion to Christ and Mary, which are important for both church history and the history of popular Christianity.

#### 267. The Holocaust.

This course focuses on the development of the Holocaust from 1933 to 1945, within the contexts of Christian anti-Semitism, Nazi ideas of race and empire, and World War II. We also address the relationship between the Nazi genocide against the Jews and Nazi persecution of other groups such as Slavs, Roma and the disabled. Finally, we consider the Holocaust's implications for Jewish and German identity, Christian and Jewish theology, international law, and understanding genocide broadly. *Also offered as HIST 267 and through European Studies and Peace Studies.*

#### 272. The Crusades.

The medieval phrase "taking the cross" described a variety of military actions, often characterized as God's will. They were influenced by and generated new ideological expressions of legitimate religious violence. This course looks at crusades to the area known as the "Holy Land," and the expanded ideology of crusading that underpinned attacks against heretics, Iberian Muslims, Jews, pagans, and others. Issues engaged include: crusaders' motivations; ideas of Christian holy war and just war; Islamicate perceptions of the crusades; pogroms against Jews; the Military Orders such as the Knights Templar; and cultural interaction and non-interaction among western Christians, eastern Christians, and Muslims in the "Latin East."

#### 273. Religion and Visual Culture.

This course considers the interaction between visibility and religion: the role that seeing might play in religious practice and the role that religion might play in visual practice. It explores not just the ways that images and objects can embody and communicate meaning, but also how they can elicit powerful responses (e.g. fascination, excitement, faith, desire, or fear) in those who view them, and how they help humans to constitute the worlds that they inhabit. The course draws upon case studies from multiple religious traditions. *Also offered in Asian Studies.*

#### 299. The Meditative Mind-Buddhism.

LAB (REL-299L) is required The Meditative Mind-Buddhism & Neuroscience of Mindfulness. This course takes a multidisciplinary approach-looking at meditation and mindfulness from both the lens of religious studies and cognitive science. Mindfulness is both a biological and neurological phenomenon and a religious-cultural construct. How we go about understanding it as a human experience or state of consciousness means looking at it multi-dimensionally from both empirical scientific and religious-historical-cultural perspectives. Religious scholars study mindfulness as an important component of Buddhist meditation, and as a phenomenon in new religious movements and self-help psychotherapeutic therapies. Studying using the tools of religious studies, we can understand its evolving cultural, historical, and spiritual importance. Neuroscientists study mindfulness because it seems to be a universal state of consciousness available to all whether one is a Buddhist or not. It can be

treated as an object of empirical research as something that causes profound physiological and neurological changes in our brains and bodies. Some of the questions explored: Is there an object or process that we can call meditation? What about "mindfulness"? To what extent does culture and religion construct mindfulness as a phenomenon? To what extent is it simply a natural human cognitive phenomenon? Does neuroscience have anything to teach us about Buddhism and religion more generally? Does Buddhism have anything to teach neuroscience more generally? This course cannot be used to fulfill the requirements of the Biology major. This course counts as an ancillary course for the Neuroscience major.

### 3000-3999. Special Topics.

These 200-level courses deal with significant topics in religious studies. Offered occasionally. The content of each course or section will vary and will be announced each semester.

#### 307. Jesus in the Gospels.

This seminar studies one or more of the gospels as the literary product of ancient Jewish and Christian history and religion. It examines how the author(s) understood the life, death, and resurrection of Jesus with respect to early Christianity and Judaism, how the evangelists communicated that understanding to their ancient audiences. Students will work collaboratively and individually to develop a sophisticated understanding of the texts in their ancient literary and historical contexts and their modern reception by Christians. We will especially consider the role of Christianity in the propagation of anti-Semitism and the Holocaust/Shoah and how Christianity developed in the shadow of the Roman Empire.

#### 331. Pilgrimage as a Spiritual Journey.

This course explores the experiences, rituals, stories, beliefs, temples/shrines, images and traveling communities associated with the religious phenomenon of pilgrimage. What kind of travel is pilgrimage? Does it have a particular structure? Are there different kinds of pilgrimages? What kind of religious experience does pilgrimage provide? These and other questions are examined through a close study of selected pilgrimages in Christianity, Hinduism and Buddhism.

#### 334. The Ways of the Gods: Shinto in Modern Japan.

Shinto or the "Way of the Gods" has long been viewed as the "archaic indigenous religion" of Japan. This course explores how, in fact, Shinto is an invented religion that changed radically throughout modern Japanese history as it evolved from local cults worshipping kami to state Shinto and new religious movements in the pre-war period to its modern guise today as religious organizations independent of state control. Topics include: Shinto mythology, religious ultra-nationalism, emperor worship and the imperial system (also called State Shinto), the Yasukuni shrine war memorial issue, Shinto in popular culture, and the role of contemporary shrines and festivals, and kami worship and ecology. Offered every other year. *Also offered in Asian Studies.*

335. Religion and Violence.

This course focuses on the intersection of and assumptions about the relationships between religion and violence. Looking at various instances of the use of force and coercion, as well as verbal and symbolic violence in religious contexts, this course engages the course topic through specific case studies, both historically distant and contemporary, to draw attention to the intersections of political, economic, and demographic concerns that shape instances of “religious violence.” This course also engages with how we may define “religion,” how we may define “violence,” and how they are perceived and discussed together in cases of terrorism, war, and persecution of minority groups. The primary goal of the course is to examine our own as well as the broader society’s assumptions about religion and violence, and to develop better critical approaches to understanding their relationships to one another. *Also offered through Peace Studies.*

337. Postcolonial India: Film & Literature.

This course is an exploration of South Asian religions and postcolonialism through fiction and film, taking as its starting point that postcolonialism refers both to the temporal period following colonialism as well as a deep engagement with and critique of the colonial experience. We will examine how novels and cinema have provided an enduring medium over the past 70 years to grapple with notions of religious identity, history, myth, gender, and sexuality. Each week, a particular fictionalized narrative will be read through the lens of postcolonial theory, so that students can explore the aforementioned themes alongside interrogations of modernity, nationalism, Orientalism, and ideas of the “subaltern.” Fulfills HU distribution (2013 curriculum). Also offered in Asian Studies, English, Film & Representation Studies, and Global Studies.

4000-4999. Special Topics Seminars.

These 300-level seminars deal with significant topics in religious studies on an advanced level. Offered occasionally. The content of each course or section will vary and will be announced each semester.

### Special Courses

360. Seminar in Religious Studies.

This is an in-depth examination of theoretical and methodological approaches to the study of religion that will enable students to do sophisticated independent research. Required of all majors and recommended for all minors in religious studies, ideally in the spring of their junior year.

450, 451. Directed Studies in Religion.

An individual study program for students showing special interest and aptitude in the study of religion, as approved by the department chair and the instructor under whom the work will be completed. A term paper is required as the product of the special study. (A 2.5 average is required.) *Also offered as ASIA 450 and 451 at the discretion of the instructor.*

489, 490. SYE: Senior-Year Experience.

An individual study program for candidates for majors in religious studies that fulfills the requirements for their SYE and may be taken in place of REL 360 with approval of the department chair. (A 2.5 average is required.) An extended term paper is required as the product of the special study.

498, 499. SYE: Honors.

This is a departmentally-approved honors project requiring an extended term paper that is the product of the special study. A cumulative GPA of 3.5 in the department is required to do an honors project.

## Sociology

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Major and minor offered.

See also Environmental Studies for the Environmental Studies-Sociology Combined major.

Visit the sociology department web page at <https://www.stlawu.edu/offices/sociology>.

## Major Requirements

Courses are in the sociology department unless noted otherwise.

1. Minimum of 9 units.
2. **One sociology course at the 100 level.** Majors may take additional courses at the 100 level, but a maximum of two such courses can be counted toward the major.
3. SOC 203. Foundations of Social Theory.
  - a. Prerequisite: any 100-level or 200-level sociology course.
4. SOC 300, Qualitative Research Methods *or* SOC 301, Quantitative Research Methods.
  - a. Prerequisite: SOC 203, Foundations of Social Theory.
5. **Advanced Topics Seminar:** Any 300- or 400-level topical seminar, including Special Topic seminars.
  - a. Prerequisite: a 100 level sociology course and a 200 level sociology course. SOC 203: Foundations of Social Theory and/or SOC 300 or SOC 301, Research Methods recommended but not required.
6. **Experiential component**, fulfilled by one of the following:
  - a. A SLU approved off-campus study program (semester or year) or SLU's Sustainability Program (year-long experience). To fulfill this requirement, students must also attend a gathering of Sociology Department faculty and other sociology majors returning from off-campus study to present a sociological reflection on their experiences. Prerequisite: any 100-level or 200-level sociology course.
  - b. Any sociology course with a CBL (Community-Based Learning) component.
  - c. SOC 309, Internship. Prerequisites: at least two sociology courses. Enrollment is by permission of instructor.
7. After the completion of Research Methods, majors who wish to pursue independent research have these options:
  - a. SOC 489/490, SYE: Research.

(1.0 unit, 1 semester, Fall or Spring) Prerequisites: SOC 203, Foundations of Social Theory; SOC 300 or 301, Research Methods; any 300- or 400-level capstone seminar, and Capstone Project Application submitted to the sociology department for approval *during the semester prior to the project's start* **or**

b. SOC 498/499, SYE: Honors Project.

(2.0 units, 2 semesters, SOC 498 in Fall and SOC 499 in Spring)

Prerequisites: 3.5 major GPA; SOC 203, Foundations of Social Theory; SOC 300 or 301, Research Methods; and a SYE Application submitted to the sociology department for approval *during the semester prior to the project's start*.

8. **Electives:** requirements noted above **plus** sociology electives must TOTAL 9-12 units.

## Sociology/Environmental Studies Combined Major

In association with the department of environmental studies, the department of sociology offers a combined major in sociology–environmental studies.

### Environmental Studies Requirements (ENVS)

101. Introduction to Environmental Studies. (1 unit)

Environmental Science and Policy (ESP) courses (3 units)

Nature/Society (N/S) course (1 unit)

Any elective from a dual-listed course in the natural sciences (1 unit)

Any elective listed under ENVS, or from programs abroad if preapproved (1 unit)

### Sociology Requirements (soc)

One course at the 100 level *chosen from the following* (1 unit)

101. Principles of Sociology.

110. Global Problems.

112. Inequality.

161. Social Problems and Policy.

169. Media & Society.

187. Environment and Society.

Students may take additional courses at the 100 level, but a maximum of two such courses can be counted toward the combined major.

203. Foundations of Social Theory (1 unit)

Prerequisite: any 100-level or 200-level sociology course.

300. Qualitative Research Methods **or** 301. Quantitative Research Methods. (1 unit)

Prerequisite: 203. Foundations of Social Theory.

Socio-environmental dynamics courses *chosen from the following* (2 units)

- 228. Race and Ethnicity
- 253. Race, Class and Environmental Justice.
- 264. Environmental Movements.
- 273. Hidden Faces of Historical Capitalism
- 314. Nomads in World History.
- 377. Sociology of Consumption.
- 3118. Sociology of the Family.
- 4010. Recreation and Resistance.

*Other courses, including Special Topics courses, may be considered in consultation with the department chair.*

Two Sociology electives (2 units)

Advanced Topic Seminar (1 unit)

Any 300- or 400-level topical seminar, including Special Topic seminars. Socio-Environmental dynamics component with a research project on a socio-environmental dynamics topic.

Prerequisites: a 100 level sociology course and a 200 level sociology course. SOC 203: Foundations of Social Theory and/or SOC 300 or SOC 301, Research Methods recommended but not required.

**Total:** 15 units

Courses that are dual-listed with environmental studies should be taken under the sociology number and count toward the sociology portion of the combined major.

## Honors

Honors will be granted to students who complete the major with at least a 3.5 GPA in sociology and who successfully complete and defend a Capstone honors thesis (498/499) before a departmental committee. Prerequisites: 3.5 major GPA; 203. Foundations of Social Theory; 300 or 301. Research Methods; any 300- or 400-level topical seminar; and a SYE Application submitted to the sociology department for approval **during the semester prior to the project's start.**

## Minor Requirements

1. A minimum of six units of credit.
2. Of these courses, no more than two sociology courses at the 100 level can be counted towards the minor.

## Restrictions

1. Majors and minors may transfer into their major/minor no more than two approved courses from other institutions, St. Lawrence departments and programs outside the sociology

department, or University-approved study abroad/off-campus programs. Permission from the department chair is required for transfer.

2. Majors and minors may count no more than one SOC 390, Independent Study, courses toward their major/minor.
3. Majors and minors may count no more than two SOC 290, Independent Study, courses toward their major/minor.
4. No more than a total of two SOC 290/390 Independent Study courses can be applied to the major/minor.
5. Core courses for the major (theory, research methods, and Advanced Topic seminars/projects) must be taken in the department.

## Courses

In addition to the regularly taught courses listed below, Special Topics courses are often offered.

### 101. Intro Soc: Principles of Sociology.

The goal of this course is to introduce students to theories and concepts of sociology, as well as to facilitate the development of each student's "sociological imagination." Members of the class will critically examine how social institutions and social structures operate, and to what ends. After introducing the sociological perspective and the research methods used to study society, we will examine what sociologists have come to know about various social structures and institutions (i.e., class, crime and deviance, the economy, education, gender, family, media, race, sexuality, etc.) as well as forms of social inequality (stratification and social class, race and ethnicity, and gender inequality). By discussing and applying theories and concepts central to the discipline, we will begin to deconstruct and understand how these social structures and institutions shape individuals' ideas about, and experiences in, the social world.

### 110. Global Problems.

This course introduces students to the sociological perspective through examination of global actors, processes and problems. The course focuses on the process of the consolidation of the world into a single economy. While some people and some regions have benefited greatly, others have suffered tremendously. We look at how social disparities take shape and figure out the reasons they are justified. *Also offered through Peace Studies.*

### 112. Inequality.

In this course we will explore an introduction to the extent of inequality in the US. The course will primarily focus on economic, racial, and gender inequality, though we will also explore sexuality, immigration, disability, political, and family, as well as the intersection of these dimensions of inequality. Fulfills SS Distribution (2013 curriculum). Fulfills DIV13 requirement (2013 curriculum). Also offered through Peace Studies.

161. Social Problems and Policy.

This course explores the causes of and responses to the phenomena labeled “social problems.” The course examines how social phenomena are defined as problems and developed into issues. We investigate the role of the media, social movements, government and private capital in identifying problems and placing them on the public agenda. We also focus on a variety of policies proposed (and/or implemented) in response to specific social problems and the political conflicts that result from competing policy alternatives. The social impacts of various policy options associated with these issues are explored. *Also offered through Peace Studies.*

169. Media & Society.

This 100-level course is designed to explore the complex and often contradictory relationship between media, culture, and society. We will cultivate sociological perspectives to analyze and explain how various forms of media—from traditional to digital—can spread their influence across society. On what terms is media content produced and consumed, and what “effects” are likely to follow? What is the “new media environment,” and what significance does it hold for media professionals and citizens? How do culture, technology, and political economy factor in? Throughout the semester, we will address each of these questions (and many more!) as we embark on an engaging, eye-opening journey through the realities of life in the increasingly mediated world. This is a hybrid class, meaning there will be a combination of in-person and online learning. The class will be split into smaller groups that will rotate days attending class in person to allow for social distancing. On class days when students are not physically present, they will be able to complete assignments and otherwise participate remotely.

187. Environment and Society.

This course explores the complex interrelations between human societies and the environment via the sociological perspective, a means of making the familiar aspects of our lives, and our understandings of the world, seem strange and new. In doing so we can better analyze our world and our place in that world especially with regard to human and natural interactions. In this course we will learn about the concepts, theories, and methods that sociologists use to understand critical issues of environmental degradation and ecological crises and how these problems are experienced differently depending on one’s location in global society. By the end of the course students will become familiar with analytical tools that enable an understanding of some underlying drivers of environmental degradation and ideas of what can be done to chart a better future. *Also offered as ENVS 187.*

The content of each course or section of these 100-level or 200-level special topics courses varies and will be announced each semester.

203. Foundations of Social Theory.

This course brings under scrutiny the false dichotomies crowding the sociological imagination: structure/agency, history/theory, macro/micro, global/local. The broad-based analytical perspective enables students to appreciate theory in the context of historical relations and processes, and to approach history from a coherent theoretical angle of vision. Students are encouraged and expected to reflect on hegemonic rationales and conventional structures of knowledge. Students are assisted in

perceiving the absurd fixation of mainstream knowledge on simplification and the axiomatic authority of disjunction, reduction, reification and abstraction. They are encouraged to see the virtue of complexity as an alternative form of knowledge of ecological/historical relations and processes. The objective of the course is to empower students by allowing them to discard simplification, and to embark on complexity as the intellectual path suitable to their reality. Prerequisite: any 100- or 200-level sociology course.

#### 219. Power, Politics and Society.

In this course we will examine the relationship between power and politics (broadly defined), and how this relationship shapes our societies. In doing so, we will start by asking some general questions about power: How can we define it? Where can we locate its sources? How is authority exerted in society? Who has it and why? Can the holders of power be challenged, and if so, how? Tackling these questions will lead us to trace the development of the modern state, nations and nationalisms, democracy, and citizenship. As we delve into these complex topics, our class discussions will include empirical cases from different parts of the world.

#### 221. Sociology of Sex and Gender.

This introduction to social science ways of thinking about sex and gender provides an overview of contributions from a variety of disciplines and considers both theoretical and historical materials. We examine the social construction of gender and sexuality and the ways gender and sexuality and society interact with and affect each other, and how change takes place. The social developments and history of gender and sexualities are explored, and contemporary issues studied. In particular, how and why gender and sex became politicized, and continue to be so, is explored.

#### 225. Women's Health and Aging.

The focus of this course is current issues related to the health and aging experiences of women in the U.S. and around the world. Emphasis will be placed on a variety of challenges women face as they experience life transitions such as puberty, menstruation and PMS, pregnancy and childbirth, caretaking, fibromyalgia, breast cancer, and menopause, as well as on issues related to reproductive justice, health disparities, and the social construction of health, illness, and aging. Students will gain an understanding of the social, historical, cultural, and demographic factors that impact health and illness and reflect on a variety of women's experiences as they age.

#### 228. Race and Ethnicity.

This course introduces students to race and ethnicity from a social-historical perspective. It provides a conceptual background for understanding race and ethnicity. We do not treat race or ethnicity as "natural" or "obvious" identities, but study the sociological and historical emergence of race as an idea: as an effective way to categorize people and as a legitimate basis for social and structural hierarchies. We focus on how socio-historical relations and processes led to current conceptions and patterns of race and ethnic categories in the U.S., and consider possibilities challenging the nature of racial/ethnic identities by examining changes in political economy and anti-racist social movements.

### 236. Sociology of Education.

Through this course you will learn how to analyze the American education system in a sociological way. You will examine topics such as the role of family background, school choice, standardized testing, college admissions, and college financial aid in educational outcomes. The course will primarily seek to answer the following question: does the American education system decrease, increase, or maintain the existing inequality in the US?

### 246. Aging in Society (with Community-Based Learning component)

This course examines the impact of aging on individuals and society, as well as the reactions of individuals and societies to aging. Theories and research on aging will be discussed, as well as the social, historical, cultural, demographic, and health factors related to the aging process. Topics include diversity in the aging experience, housing and long term care, health and health care, social support and interpersonal relationships, work and retirement, and death and dying. Students will learn about Medicare, Social Security, and a variety of services (sometimes) available to older adults. A Community-Based Learning component is integrated with the course material to facilitate a thorough understanding of aging in society. This course fulfills the Experiential Component requirement for majors.

### 253. Race, Class, and Environmental Justice.

This course focuses on the distribution of environmental degradation and environmental protection, both domestically and globally. The social processes that generate synergistic racism and class stratification, affecting the distribution of ecological costs and benefits, are explored. Substantive topics include the siting of hazardous facilities and thermo-nuclear weapons testing, the socio-ecological conditions of migrant farm workers, extraction of resources from Native lands, and the transnational export of toxic waste to the "Global South." The course examines the origins and impacts of a distinct environmental justice movement that has emerged in the U.S. Written and oral assignments involve individual and collaborative quests for socially equitable solutions to socio-eco-historical injustices. *Also offered as Environmental Studies 253.*

### 254. The Social Identity of Policing.

This course is neither about the Police as a specific occupation or profession, nor is it about social Identities as free-standing and eclectic categories. We will focus on how and why policing has become the underpinning of modern social relations through the conflicting dynamics between many identities and one law. To understand these processes, we will explore two related dimensions of policing embodied in the concepts of the mobility of control and the control of mobility. Beginning with a small-scale instance of a town, we will analyze how/why social identities are constructed through the processes of established and outsider dynamics. We will further build our argument in exploring the relations between the law, the control of mobility and policing identities using instances regarding the movement of people and the racialization of space. Lastly, we will conclude with contextualizing the dynamics of law, surveillance, the mobility of control, and policing identities. To do so, we will historicize the manifestations of surveillance and the reinforcement of social sorting, creation of generic categories, and the making of digital reputations.

### 255. Self and Society.

In this course we will study the relationship between self and society by examining the process of socialization. We will consider both micro and macro social forces that shape this relationship. Everyday interactions but also broader historical forces and processes of social change will be part of our discussion. The first part of the course will focus on some of the main theoretical perspectives on self and society. We are then going to examine how our selves are shaped and reshaped by various institutions such as schools, family and the state.

### 264. Environmental Movements

This course examines efforts by social movements around the globe to affect change in relation to environmental issues. Students will explore diverse case studies of grassroots collectives mobilizing to address energy production, conservation, environmental contamination, food, and the climate crisis. Throughout, we will draw on, and apply, sociological theories of social movements and social change. Students will have an opportunity to engage action-oriented research related to environmental movements and social advocacy, guided by their own passions and interests. Fulfills SS Distribution (2013 curriculum). Fulfills the EL requirement (2013 curriculum).

### 273. The Hidden Face(s) of Historical Capitalism

This course is intended to explore the fundamental bases of the capitalist world-economy. The commodification of land, labor, and money and their respective impact upon ecological manipulations, social transformations, and power relations have been the underpinning of capitalist expansion. In taking these three material dimensions as our guide, we will be encouraged to appreciate historical and contemporary challenges regarding environmental sustainability, societal reproduction, and polarization. In similar vein, we will address the problematic in global governance and issues pertaining to the future of the capitalist system.

### 275. Medical Sociology.

In this course, we examine aspects of health and illness from a sociological perspective. We consider a variety of social, historical, and cultural forces in which health and illness are produced and understood in the United States and globally. We spend time throughout the semester studying the biomedical approach and public health approach to health and illness. Main topics in the course include: the social determinants of health and health inequalities, the social construction of health and illness, the profession of medicine and other health care professions, and the health care system in the United States. Students will also have the opportunity to analyze and reflect on a variety of health care models from other countries. Counts toward the public health minor and peace studies minor.

### 288. Dilemmas of Development.

What does development mean? Is economic development always at the expense of social integration? By whose standard should we measure development? Is there a single best way of development? Are some cultures more likely to develop than others? Is globalization the remedy for underdevelopment? This course covers the basic sociological theories on development and globalization, and answers the above questions by looking at issues such as gender and class inequality, power of multinational

corporations and multilateral agencies, consumerism, environment, and the search for alternative models in Asia and other parts of the world. *Also offered as ASIA 288.*

290. Independent Study in Sociology. (0.5 unit)

Open to students who wish to pursue more specialized or advanced sociological study, fieldwork and research with a faculty mentor. Prerequisite: at least one Sociology course. Permission of instructor is required.

3113. Green Café v 2.0.

The Green Café aims to increase student engagement with local sustainable food options on campus and provide a platform for building and expressing social justice advocacy. Food intersects culture, identity, equity, ecology, and economics. Food is thus an important theoretical and applied space to explore and facilitate change around these topics. In this course, students will learn how our dominant food system became inequitable and unsustainable, and how ecological regenerative growing techniques, social equity, and economic viability can be built [back] in. This course is hands-on. Students will develop, brand, and run events on campus around local food, food access, and gratitude / injustice / community. On a weekly basis, students will also combine guided academic learning with experiences farming, preparing food, and collaborating with SLU's dining services team, student groups, and other community members. This course satisfies the experiential learning component of the Business in Liberal Arts Major and Sociology major. Students must also register for a 3-hour Thursday lab. Based on student interests and class demands, some labs may take place other times during the week at instructor / student discretion once the semester is underway. Fulfills DIV13 Distribution (2013 curriculum).

3118. Sociology of Family with CBL.

In this course, we will analyze US families as a consequence and a cause of other social factors. We will analyze broad trends in family formation and structure, the ways in which families have changed over time, the diversity of family patterns, and the effects of family on other social institutions. Decisions about family seem very private and personal, but by examining family sociologically, we come to see that family decisions are actually very social, as the social world influences the choices that we make. Likewise, these seemingly personal decisions have wide-reaching effects across the social world, affecting institutions such as the education system, the labor market, and health. This course has a community-based learning component which will require you to work at your placement site every week.

3120 Sociology of Career (0.5 Unit)

This course examines sociological research on occupations, with a specific focus on inequality in professional career entry. Students will be required to apply the course content to personal reflections and documents for their own career futures.

### 300. Qualitative Research Methods.

This writing-intensive course is an introduction to a variety of qualitative social research methods. It includes discussions of the principles of social research, the relationship between theory and method, research design, issues of validity and reliability, and ethical concerns in qualitative research. Students learn qualitative techniques by designing and implementing a group based research project as well as using a variety of "hands-on" exercises in the field. Students have the opportunity to engage in participant observation, in-depth interviews, content analysis and other unobtrusive methods.

### 301. Quantitative Research Methods.

This writing-intensive course is an introduction to quantitative social research methods with an emphasis on survey data. Students engage in questionnaire and table construction, and data management and analysis using SPSS to complete an individually designed, ongoing research project throughout the semester. The course covers topics such as hypothesis and questionnaire construction, conceptualization and operationalization, sampling, data collection, processing, and analysis, reliability and validity, research ethics, and the presentation of research. Students learn using a hands-on, computer-based approach to quantitative methods and data analysis. Prerequisite: SOC 203, Foundations of Social Theory.

### 304. Anti-Systemic Movements

The expansion of social, economic, and political inequalities as well as resistance to them have been part and parcel of the historical system of capitalism. The development of the capitalist system has always been countervailed by the actions of anti-systemic movements. Adopting a long-term, large-scale angle of vision, this course brings to light the historical roles of different anti-systemic social movements in shaping the development of capitalism. Accordingly, we look at diverse types of anti-systemic movements in different historical contexts, ranging from nineteenth-century workers', twentieth-century national liberation, to twenty-first-century environmental, fundamentalist, and LGBTQ. In addition, we also explore potential forms and roles of anti-systemic movements in the unprecedented context of the systemic chaos or the terminal crisis of capitalism.

### 308. Death and Dying.

This course explores social, historical, ethical and cultural aspects of death and dying. We will analyze the social meaning of death from a historical and cross-cultural perspective. Additional topics include the definition of death, attitudes and perceptions of death, ways of dying, the medicalization of dying, life extension, palliative care and hospice, euthanasia, body disposal and abuse, and the death industry. The course will offer students the opportunity for reflection and analysis on a number of issues related to death and dying. Prerequisites: a 100-level soc course and a 200-level soc course. No pass/fail.

### 309. Internships.

Internship opportunities exist in social welfare, gerontology, healthcare, social policy, law, criminal justice, the media and college administration. The department also encourages students to be imaginative and innovative in developing internships to meet their own interests. Internships require a commitment of eight hours a week. Students may not enroll in more than one semester of internship

credit without petitioning the sociology department for approval. Students interested in exploring internship opportunities must contact the instructor prior to course registration during the preceding semester. Not open to first-year students. Prerequisite: at least two Sociology courses. This course fulfills the Experiential Component requirement for majors. Permission of instructor required.

### 310. Slavery, Race and Culture.

The purpose of this seminar is to familiarize students with the world of slavery and its relation to the wider world of capitalism. Long a part of the global capitalist economy, slaves and slavery have been critical historical agents in shaping various aspects of social relations. The history of slavery has laid the foundation for race formations. Far from being a peculiar institution, slavery is indeed central to the making of the modern age. Pre-requisite: a 100-level course and a 200-level course.

### 314. Nomads in World History.

Throughout history, the terms nomad and barbarian have been used interchangeably, and with negative connotations. Similarly, the terms settled and civilized have been synonymous, with positive associations. This dichotomy arises out of particular class and power interests and has had, as a consequence, an impact on our understanding of world history and the place of nomads in it. It has resulted in the stigmatization of nomads. In this course, we bring the nomadic factor back to focus and establish a more comprehensive picture and interpretation of world history. Prerequisites: a 100-level course and a 200-level course.

### 316. Nations and Nationalism.

This course starts off by situating the rise of nations and nationalism in its historical context. It then moves on to engage with contemporary topics including everyday manifestations and reproductions of nationalism, and the relationship between nationalism and conflict. Through our discussions we will explore how and to what effect states employ nationalist policies inside their territories. Our readings will draw from a variety of empirical cases reflecting different forms of nationalism as well as different trajectories of nation-building.

### 377. Sociology of Consumption.

In this seminar, we explore consumption along a wide range of material dimensions. The sociology of consumption is concerned with the relationships of (a) the social to the natural and (b) the social to the social and (c) their consequences, such as social disruption and environmental destruction; “things” are fetishized and humans are commodified. The sociology of consumption helps us to understand this in the context of both the capitalist world economy and cultural expressions from early modernity to postmodernity. Prerequisites: a 100-level course and a 200-level course.

### 390. Independent Study in Sociology. (1 unit)

Open to students who wish to pursue more specialized or advanced sociological study and research with a faculty mentor. Prerequisite: at least two sociology courses. Permission of instructor required.

The content of each course or section of these 300- or 400-level special topics courses varies and will be announced each semester.

### 316. Nations and Nationalism.

This course starts off by situating the rise of nations and nationalism in its historical context. It then moves on to engage with contemporary topics including everyday manifestations and reproductions of nationalism, and the relationship between nationalism and conflict. Through our discussions we will explore how and to what effect states employ nationalist policies inside their territories. Our readings will draw from a variety of empirical cases reflecting different forms of nationalism as well as different trajectories of nation-building.

### 4010. Recreation and Resistance.

Description: In August 2020, the Milwaukee Bucks mobilized a wildcat strike and refused to play pro basketball in solidarity with Black Lives Matter. Just a few years earlier, Colin Kaepernick made headlines for a similar effort on the football field. Fifty years before that, it was Tommie Smith and John Carlos who rocked the globe with fists raised and heads lowered during the U.S. national anthem at the Olympics. The truth is that American sports, and recreation more generally, have since inception been sites where social, cultural, and political inequities manifest and are challenged. This course explores how racial injustice and other forms of marginalization have been inscribed in our national leisure activities, as well as the ways communities use recreation and sport to bring about greater justice.

### 489/490. SYE Independent Study.

This requires completion of an individual research project mentored by one of the sociology faculty. Before registering, students should work with a faculty mentor to prepare a research proposal outlining the intended thesis, theoretical framework, methodology and ethical considerations including the application for human subjects review approval where necessary. This is a one-semester project (Fall or Spring). Prerequisites: SOC 203 Foundations of Social Theory, SOC 300 Qualitative Research Methods or 301 Quantitative Research Methods, any 300 or 400-level seminar, and a SYE Application submitted to the Sociology Department for approval during the semester prior to the project's start. Permission of instructor required.

### 495/496. SYE Honors in Sociology.

This requires completion of an individual research project mentored by one of the sociology faculty. The project is undertaken over two semesters. Students need to register for both 495 (fall) and 496 (spring). Honors will be granted to students who have completed and defended a thesis before a departmental committee. Prerequisites: 3.5 major GPA, SOC 203 Foundations of Social Theory, SOC 300 Qualitative Research Methods or 301 Quantitative Research Methods, any 300 or 400 level seminar, and a SYE Application submitted to the Sociology Department for approval during the semester prior to the project's start. Permission of instructor required.

# Sports Studies and Exercise Science

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Minor offered.

Visit the sports studies and exercise science webpage at <https://www.stlawu.edu/offices/sports-studies-and-exercise-science>.

## Minor Requirements

The following courses may also receive credit toward the minor:

### Biology

240. Human Anatomy. Physiology

### Psychology

355. Sport Psychology.

## Coaching Certification

Students completing the following courses will have fulfilled the required coaching courses and will receive a necessary certificate to apply for a New York State coaching license. Please note that NYS requires additional certifications not offered through the SSES minor. The required three-course sequence includes Introduction to Kinesiology (SSES 115) *or* Philosophical Perspectives on Sport (SSES 216), Sport Medicine (SSES 319) and Coaching Theory (SSES 320).

## Courses

### Fitness Courses

100BEG. Fitness-Beginner Level (0.5 unit)

This course is designed for the beginner exerciser. The focus of the course will be on exposure to various types of fitness programs. There will also be emphasis on program design and maintenance. This class is not recommended for student-athletes. It does not count toward the SSES minor. This course is not repeatable and may not be taken once SSES 100ADV or SSES 100INTM have been completed.

100INTM. Fitness-Intermediate Level (0.5 unit)

This course is designed for the intermediate exerciser. The focus of the course will be on exposure to various types of fitness programs. There will also be emphasis on program design and maintenance. This class is not recommended for student-athletes. This course is not repeatable. Can not take if you have taken SSES 100BEG or SSES 100ADV. It does not count toward the SSES minor.

**100ADV. Fitness-Advanced Level (0.5 unit)**

This course is designed for the advanced exerciser. Focus will be on exposure to various types of fitness programs. There will also be emphasis on program design and maintenance. T. It does not count toward the SSES minor. This course is not repeatable. Can not take if you have taken SSES 100BEG or SSES 100INTM

Students who are interested in the sports studies and exercise science minor must complete a five-course sequence from among any full unit course listed below except SSES 100, SSES 100S, or SSES 100W Students may not take more than three SSES independent/internship courses during their enrollment regardless of the unit value Only ONE independent/internship full unit course may count towards the SSES minor requirement. Students will be advised by the department's coordinator of academic programs.

**100S. (Lifeguarding) & 100W (Water Safety Instruction). (0.5 unit)**

These courses are intended to provide students with the knowledge and skills for lifeguarding and water safety. To be admitted to either course, students are required to pass a pre-course test of swimming skills. At the conclusion of the course, students will have the opportunity to complete an American Red Cross Lifeguarding Certificate. These courses do not count toward the SSES minor.

**Minor Courses**

Students who are interested in the sports studies and exercise science minor must complete a five-course sequence from among any full unit course listed below except SSES 100, SSES 100S, or SSES 100W Students may not take more than three SSES independent/internship courses during their enrollment regardless of the unit value Only ONE independent/internship full unit course may count towards the SSES minor requirement. Students will be advised by the department's coordinator of academic programs.

**115. Introduction to Kinesiology.**

This is the introductory course for the minor in sports studies and exercise science. This course surveys six primary sub-disciplines of Kinesiology using theoretical/conceptual, experiential, and professional lenses. Emphasis is on the role of physical activity in human development throughout the lifespan and our relationship with physical activity in daily life.

**212. Sociological Perspectives on Sport.**

This course is a study of the structural dimensions of the social phenomenon of sport. Attention is directed toward examining the relationship between sport as a social institution and other dominant patterns of social interaction. While sports in the United States are the primary focus, other societies are examined as well.

216. Philosophical Perspectives on Sport.

The study of ethics and moral reasoning is introduced through the lens of sport. Topics such as moral skepticism, ethical relativism, utilitarianism vs. Kantianism, competing concepts of impartiality, the care vs. justice perspective, positive vs. negative duties and the doctrine of double effect are explored. Students will be asked to evaluate their own opinions, beliefs and attitudes that govern their judgment and/or actions within the realm of sport. *Also offered through Philosophy department.*

230. Principles of Health and Wellness.

This course addresses health and wellness principles as they pertain to physical inactivity. Students will explore, analyze, and reflect upon their own lifestyles, specifically examining the impact of behavioral choices on their own health and wellness. Content includes a Breath work book club. Some relevant course topics include: fitness, nutrition, nutrition analysis stress management, sleep, wearable technology, aging, and obesity.

234. Human Exercise Physiology. *(with lab)*

This course addresses the anatomy, physiology, and adaptations of the organs and systems of the human body involved during exercise. The course explores 1) Physiology of exercise at a cellular level with emphasis on homeostasis, energy production and exercise metabolism, 2) at a tissue, organ, and organ system level with emphasis on the nervous, muscular, and cardiorespiratory systems, and how the body dissipates heat during exercise. In-class laboratory sessions supplement the course.

242. Administration Athletic Teams

This undergraduate course deals with the administration of athletic teams. The major focus is administrative theory and practice that leads to more efficient coaching, especially at the collegiate level. NCAA rules, budgets, fundraising, recruiting, team organization and other topics will be discussed. Permission only, SSES minors only.

319. Sport Medicine. *(with lab)*

This course provides background in the care and prevention of injuries to athletes. Class topics include nutrition, rehabilitation, physical fitness, protective equipment and modern techniques of sports medicine. Lab sessions include basic skills in first aid and evaluation of concussions, stretching, and basic taping and ace wrapping. Prerequisites: SSES 115 or 216 and/or permission of instructor.

320. Coaching Theory.

This course provides an overview of the philosophies and practices of coaching. Professional responsibilities, management styles and coach/athlete interaction styles are examined as they pertain to all aspects of the coaching challenge. Prerequisites: SSES 115 or 216, and 319.

366. Obesogenic Society.

This course explores societal patterns of food consumption, marketing, and nutritional information. In addition, environmental facilitators and barriers to physical activity are explored. This course focuses on community and policy implications impacting individual choices regarding levels of consumption and physical activity.

390. Independent Study.

An opportunity to pursue specialized study or research under faculty supervision. Proposals must be presented to the department chair (or designee) for approval. Students may not take more than three SSES independent/internship courses during their enrollment regardless of the unit value Only ONE independent/internship full unit course may count towards the SSES minor requirement. Students may not earn more than one semester of credit for this course.

391. Internship.

Internships are available in such areas as sport medicine, fitness and sport management. Each is designed as a student-arranged study that is comprised of a structured experience with an organization or institution and involves intensive work on a particular project. Proposals must be presented to the department chair for approval. Students may not take more than three SSES independent/internship courses during their enrollment regardless of the unit value Only ONE independent/internship full unit course may count towards the SSES minor requirement.

SES-3008. Sports Media Intern. (0.5 Credits)

BY PERMISSION ONLY. The Athletics Media Intern will learn how to set up and work with HD video production within the athletics media group. The student will learn how to diagnose issues including: hardware problems, interconnectivity issues, data/software conflicts etc. It would be expected that the intern would familiarize themselves with each of our venue IT setups. The intern will work with the Sports Information Department to develop/integrate additional components for our programming (develop system for integrating additional feeds and advertisement). The student will learn how to use the backend software for integrating video feeds with our web site. This internship is an opportunity to engage with sports media production in a collaborative environment.

415. SSES 415 Senior Seminar: The Power and Influence of Sport

This seminar is an advanced study of topics and issues that surround the power and influence of sport in our popular culture. We will read, write, discuss, and critically reflect upon the claims made in the course material and what the current state of sport means to each of us on a personal level. You will need to bring a keen willingness to participate and engage with your peers to this seminar and moreover, should be prepared to dig beyond the surface of your pre-conceived notions of the social and ethical responsibilities of sport.

490. SYE: Independent Study.

The course offers seniors who minor in sports studies and exercise science the opportunity to pursue advanced study or research under the guidance of a faculty sponsor. Permission required. Available to SSES minors only.

## Statistics

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Major and minor offered under the auspices of the mathematics, computer science and statistics department. Visit the department web page at <https://www.stlawu.edu/offices/math-computer-science-and-statistics>.

### Major Requirements

The requirements for a major in statistics are 11 units, consisting of eight foundational courses and three electives. Majors must also have a computing component and a senior-year experience which may be counted as electives.

#### Foundational Courses

- STAT 113. Applied Statistics.
- STAT 213. Applied Regression Analysis.
- STAT 325. Probability.
- STAT 326. Mathematical Statistics.
- MATH 135. Calculus I.
- MATH 136. Calculus II.
- MATH 205. Multivariable Calculus.
- MATH 217. Linear Algebra.

#### Computing Component

- STAT 234. Introduction to Data Science
- CS 140. Introduction to Computer Programming
- CS 219. Techniques of Computer Science

#### Electives

Two at the 200-level or above and one at the 300-level or above. MATH 280, CS 305, and CS 219 may count as electives. At least two of the electives must be from STAT.

## Senior-Year Experience

Students must fulfill a Senior-Year Experience (SYE) requirement either in statistics as one of the 11 units in the major or by completing an SYE outside the major. In addition, with the permission of the department chair, this requirement may be satisfied by completing an appropriate internship.

## Honors

Honors work in statistics provides the student with an opportunity for more independent and creative work in pure or applied statistics. A minimum GPA of 3.5 in the major is required to receive honors in statistics. In addition, each student applying for honors must complete a departmentally approved honors project. This work is completed as a senior year experience project. Interested students should consult the department chair.

## Notes

Students considering graduate work in statistics are strongly encouraged to take MATH 217, MATH 305, and CS 140 in addition to majoring or minoring in statistics.

Students planning to participate in an off-campus program should seek early advice from the department on the best way to plan their major program.

## Minor Requirements

Five units are required for this minor of which at least three must be in Statistics (i.e., have a STAT prefix). The remaining two units can be either from Statistics or from among the options listed below. Additionally, one of the two non-STAT units may be an independent study/honors project without a STAT prefix that involves substantial statistical analysis.

ECON 200.	Quantitative Methods in Economics.
ENVS 323.	Environmental Epidemiology.
PSYC 205.	Research Methods in Psychology.
SOC 301.	Quantitative Methods.

## Advanced Placement

Students who enter St. Lawrence with a 4 or 5 on the Advanced Placement Statistics test will receive credit for STAT 113 and are encouraged to start with STAT 213 or STAT 226.

## Major/Minor with Mathematics

By their very nature, the disciplines of Mathematics and Statistics are closely connected, and several of the courses offered within the Mathematics, Computer Science, and Statistics department can be used towards a major or minor in both. However, to ensure that the students that wish to double major (or major and minor) in the two fields have sufficient depth of knowledge within each field, there are some limitations on the number of courses that can count towards both. Details can be found on the Mathematics, Computer Science, and Statistics department webpage: <https://www.stlawu.edu/offices/math-computer-science-and-statistics>.

## Courses

### 113. Applied Statistics.

An introduction to statistics with emphasis on applications. Topics include the description of data with numerical summaries and graphs, the production of data through sampling and experimental design, techniques of making inferences from data such as confidence intervals, and hypothesis tests for both categorical and quantitative data. The course includes an introduction to computer analysis of data with a statistical computing package.

### 213. Applied Regression Analysis.

A continuation of Statistics 113 intended for students in the physical, social or behavioral sciences. Topics include simple and multiple linear regression, model diagnostics and testing, residual analysis, transformations, indicator variables, variable selection techniques, logistic regression, and analysis of variance. Most methods assume use of a statistical computing package. Prerequisite: STAT 113 or ECON 200 or permission of instructor.

### 226. Statistical Methods for Data Collection.

An introduction to statistical methods for data collection. Topics include methods for survey sampling and design of experiments. Survey sampling topics such as simple random sampling, survey sampling, cluster sampling, and capture/recapture sampling are covered. Design of experiment topics such as randomization, blocking, completely randomized design, randomized complete block design, Latin square, and factorial designs are covered. Statistical methods for analyzing data collected via the aforementioned methods are extensively discussed. Thorough use of a statistical software package is incorporated. Prerequisite: STAT 113 or ECON 200 or permission of instructor.

### 234. Introduction to Data Science.

An introduction to fundamental data science concepts using modern statistical programming languages and software. The course assumes no prior knowledge of programming but a familiarity with basic statistics is required. The course focuses on building essential data science skills such as data manipulation and visualization, basics of programming, string manipulation, and modern data sources (such as web and databases). Emphasis will be placed on building skills applicable to large-scale projects. Students may receive credit for only one of STAT 234, STAT 3007, or STAT 201. Pre-reqs: STAT-113 or ECON-200.

#### 240. Topics in Statistical Learning.

This 0.5 unit, half semester class, is intended to introduce students to a variety of tools and methods in statistical and machine learning. Topics may include unsupervised learning (i.e., cluster analysis), dimensionality reduction, and supervised learning (via classification algorithms). The emphasis will be on applying procedures to data and interpreting both numerical and graphical results. Prerequisite: STAT 201 and one of STAT 213, 226 or 342, or permission of instructor. Offered as scheduling allows.

#### 313. Advanced Linear Models.

In previous Statistics courses, normality and independence of errors (residuals) were fundamental assumptions of the models encountered. However, in the real world, things are not always normal or independent. This course will cover more advanced techniques such as generalized linear models (including Poisson regression and Logistic regression) and multilevel models so that students can develop statistical models in a wider range of real-world situations. Pre-req: STAT-213. Offered as scheduling allows.

#### 325. Probability.

This course covers the theory of probability and random variables, counting methods, discrete and continuous distributions, mathematical expectation, multivariate random variables, functions of random variables and limit theorems. Prerequisite: MATH 205. Offered in the fall semester. *Also offered through Mathematics.*

#### 326. Mathematical Statistics.

Following STAT 325, this course deals with the theory of parameter estimation, properties of estimators and topics of statistical inference, including confidence intervals, tests of hypotheses, simple and multiple linear regression, and analysis of variance. Prerequisite: STAT 325. Offered in the spring semester.

#### 333. Advanced Statistical Models

In previous Statistics courses, normality, and independence of errors (residuals) was a fundamental assumption of the models encountered. However, in the real world, things are not always normal or independent. This course will cover more advanced techniques such as generalized linear models (including Poisson regression and Logistic regression) and multilevel models so that students can develop statistical models in a wider range of real-world situations. Pre-req: STAT-213 Cannot take if you already taken STAT-4003. Offered as scheduling allows.

#### 342. Econometrics.

A study of statistical techniques economists has found useful in analyzing economic data, estimating relationships among economic variables, and testing economic theories. Topics include multiple regression, PROBIT, and logit analysis, heteroscedasticity, autocorrelation, and simultaneous equations models. Prerequisites: ECON 200, 251 and 252 and MATH 135. *Also offered as ECON 342.*

343. Time Series Analysis.

Statistical methods for analyzing data that vary over time are investigated. Topics may include forecasting systems, regression methods, moving averages, exponential smoothing, seasonal data, analysis of residuals, prediction intervals and Box-Jenkins models. Application to real data, particularly economic data, is emphasized along with the mathematical theory underlying the various models and techniques. Prerequisite: MATH 136 or permission of the instructor. Offered every other year.

352. Statistical & Machine Learning

Introduces techniques for developing advanced models from datasets, for the purposes of better understanding the data and making predictions about future data. Techniques include linear and regularized regression, nearest neighbor classification, support vector machines, decision tree ensembles, and neural networks. Examines real-world applications, both successes and failures, the latter of which often involve data with embedded biases. Students will develop both technical and ethical competence in using some of the most powerful computational tools in data science. Prerequisites: STAT 213, CS 219, and MATH 217. Offered as scheduling allows. *Also offered as CS 352 and DATA 352.*

289, 389. Independent Study

Permission required.

450. SYE: Senior Seminar.

Permission required.

489. SYE: Senior Project for Majors.

Permission required.

498. SYE: Senior Honors Project for Majors.

Permission required.

## World Languages and English

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Two majors offered: English and French and English and Spanish.

Visit <https://www.stlawu.edu/offices/world-languages-cultures-and-media> for more information.

### Requirements in English for all majors: 6 units

#### English Literature

1. 250. Methods of Critical Analysis
2. Two literature courses at the 200 or 3000 level
3. Three literature courses at the 300 or 4000 level

#### English Creative Writing

1. 250. Methods of Critical Analysis
2. One literature course at the 200 or 3000 level
3. One literature course at the 300 or 4000 level
4. Two creative writing courses at 200 or 3000 level One creative writing course at 300 or 4000 level, which must be in the same genre as one of the 200-level creative writing courses.

### Requirements for English and World Languages Major

1. Six language courses at 103 level or higher.
2. One elective course multi-listed as English and World Languages

## World Languages Cultures and Media

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Majors offered in Francophone Studies, Estudios Hispánicos (Spanish), and Multi-Language. Minors offered in Arabic Studies, Chinese Studies, Francophone Studies, German Studies, Italian Studies and Estudios Hispánicos (Spanish).

### Requirements for Majors and Minors

For details on specific study abroad programs, visit <https://www.stlawu.edu/offices/ciis>.

#### Francophone Studies (major and minor)

The major consists of ten courses at the 103 level or above. One of the 10 courses can be a cultural course related to the field taken in English through the World Languages Dept. The minor consists of six courses at the 101 level and above.

Students who begin French at a level higher than 104 are exempt from one major unit. Except for LANG 350, courses at the 300 level are offered only in France; 400-level courses, including Independent Study and Honors Project, are offered only on campus.

In France, courses are taught in French, or in English.

Students on the program in France receive 4 units toward the Francophone studies major or minor if they take courses in French at the university (300-levels), they will get 2 units if they take courses in English and French language classes at the University of Bordeaux. The minor consists of six courses at the 101 level and above. Students on the programs in France may count three courses toward the minor (semester program).

### **Estudios Hispánicos (major and minor)**

The major consists of 10 courses at the 103 level or above. One of the 10 courses can be a cultural course related to the field taken in English through the World Languages Department.

Students who begin Spanish at a level higher than 104 are exempt from one major unit. Except for LANG 350, courses at the 300 level are offered only in Spain and Costa Rica; 400-level courses, including Independent Study and Honors Project, are offered only on campus.

It is possible to earn four units toward the major during a semester in Spain (Madrid) or Costa Rica (San José); students who remain a year in Spain may earn seven units toward the major.

The minor consists of six courses at the 101 level and above.

Students on the programs in Spain or Costa Rica may count three courses (semester program) or five courses (year program) toward the minor.

### **International Economics and World Languages (four majors)**

Students can construct a major by completing seven required courses in economics and specific requirements in either French, German, Spanish or multi-language. For details and further obligations, see the International Economics and World Languages section of this *Catalog* or visit <https://live-main-stlawu.pantheonsite.io/offices/world-languages-cultures-and-media/international-economicslanguagesmajors>

### **Multi-Language (major)**

The major consists of:

- Four courses at the 103 level, and above, in one language designated as “the language of concentration.”
- Four courses per language in two other languages.

### **Multi-Language Major (World Cultures and Media track) – total 12 units**

The major consists of six courses:

- Four courses at 103 level and above in the language of concentration.
- Four courses in a secondary language.
- Four courses in World Cultures and Media courses.

### **Arabic Studies (minor)**

The minor consists of:

Four language courses, of which two must be taken on campus.

Two English courses: at least one from the World Languages, Cultures and Media Department and one English course related to the minor from the approved list given below.

Special topics related to the Arabic culture and Arabic world taught in other disciplines count toward the minor.

If Arabic is also part of a multi-language major, students are required to take two additional classes for the minor in Arabic Studies.

All classes in Jordan count toward the minor.

### **Arabic**

101, 102. Elementary Arabic.

103, 104. Intermediate Arabic.

201. Advanced Arabic.

489, 490. SYE: Independent Study.

3009. Conversational Arabic & Media.

203. Arab Society Through Films, Hip Hop, and Graphic Novels.

3013. Arabic Language Through Songs and Film.

3014. Intro to Translation.

3015. Mediterranean Culture Through Cinema.

4000. Arabic Literature and Media.

### **Global Studies**

350. Global Palestine.

### **Government**

290. Israeli-Palestinian Conflict.

331. Politics of the Middle East.

### **History**

160. The Islamic World.

230. The Middle East in the Nineteenth Century

231. The Modern Middle East

368. Palestine and the Arab-Israeli Conflict.

379. Colloquium in Middle Eastern History.

### **Chinese Studies (minor)**

The minor consists of six units:

- Four language courses, of which two must be taken on campus.
- Two courses from the approved list given below.

Special topics related to Chinese history and culture taught in other disciplines count toward the minor.

If Chinese is also part of a multi-language major, students are required to take two additional classes for the minor in Chinese Studies.

All courses taken in the Shanghai program count toward the minor.

### **Chinese**

101, 102. Elementary Chinese.

103, 104. Intermediate Chinese.

201, 202. Advanced Chinese.

489, 490. SYE: Independent Study.

### **Literature/Asia**

232. Cultures of China through Fiction and Film.

234. Chinese Literature and Film.

238. Buddhism and Daoism through Literature and Film.

### **Government**

293. (when offered on topics about China)

322. Chinese Politics.

### **History**

105. Early Asian Civilizations.

106. Modern Asia.

292. Modern China.

### **Philosophy**

223. Asian Philosophy.

### **Religious Studies**

223. Religious Life of China.

### **German Studies (minor)**

The minor consists of six courses:

- Four language courses.
- Two German Studies courses taught in the department in English or from the approved list given below when no German course in English is offered.

Students on the Vienna program may earn up to three units toward the completion of the minor, one for the German language course and two for general German Studies. Those studying abroad in Germany through Colgate's Freiburg Study Group or an ISEP program may earn up to three units toward the completion of the minor for courses approved by the department.

### **German**

101, 102. Elementary German I & II.

103, 104. Intermediate German I & II.

282. New German Cinema.

283. Berlin Hollywood.

**Art and Art History**

117. Survey of Art History II.

203. Art of the Northern Renaissance.

204. Baroque and Rococo Art.

207. 19th Century European Art.

252. History of Modern European Art.

337. Architecture: Symbol and Ideology

**Digital Media & Film**

251. History of the Cinema.

3043. Science and Cinema.

3092. European Cinema

**Government**

206. Political Theory.

330. European Politics.

347. Marxist and Critical Theory.

**History**

205. Nineteenth-Century Europe.

206. Twentieth-Century Europe.

209. Medieval Europe

211. Women in Modern Europe, 1750 to the Present.

267. The Holocaust.

372. European Identities, 1700-2000.

375. Colloquium in European History.

**Music**

333. Mozart and the Classical Tradition.

335. The World of Clara and Robert Schumann.

**Philosophy**

100. Introduction to Philosophy.

203. Ethical Theory.

208. Modern Philosophy.

### **Italian Studies (minor)**

The minor consists of six courses:

- Four language courses, of which two must be taken on campus.
- Two English courses: at least one from the World Languages, Cultures and Media Department and one English course related to the minor from the approved list given below.

Special topics related to the Italian history and culture taught in other disciplines count toward the minor.

If Italian is also part of a multi-language major, students are required to take two additional classes for the minor in Italian Studies.

All classes taken in any of the approved St. Lawrence programs abroad in Italy will count towards the minor.

#### **Italian**

101, 102. Elementary Italian I & II.

103, 104. Intermediate Italian I & II.

201. Language through Film and Visual Culture.

#### **Art and Art History**

116. Survey of Art I.

117. Survey of Art History II.

202. Art of the Italian Renaissance.

204. Baroque and Rococo Art.

4401. Baroque and Modern Architecture.

#### **Music**

234. Music in Venice.

#### **Performance and Communication Arts**

312. The Public Sphere of Renaissance Venice.

#### **Religious Studies**

102. Religion and Science.

206. Introduction to The New Testament.

227. Religion in Ancient Greece and Rome.

### **Caribbean, Latin American and Latino Studies (minor)**

Students must earn six units of CLAS credit from at least two departments and/or programs to complete the minor. See the description under Caribbean, Latin American and Latino studies in this *Catalog*.

## English for Speakers of Other Languages, ESOL (no major or minor)

All courses denoted with an ESOL designation provide instruction and support to students whose first language is not English (including both international students and first-generation immigrants). Some students will be assessed prior to the start of their first year and will be notified if mandated to take one or more of the ESOL courses. Courses denoted with LANG/EDUC are for students interested in Teaching English for Speakers of Other Languages (TESOL).

## Courses

### Arabic

#### 101. Elementary Arabic. (*with lab*)

An introduction to Modern Standard Arabic and Arab culture, for students who have never studied Arabic. The course begins with an introduction to Arabic sounds and letters. The teaching and learning emphasize the functional use of Arabic and communication in context by means of listening, speaking, reading and writing. The course also introduces students to aspects of Arabic culture and everyday life in the Middle East. At the end of the course, students will be able to read and write Arabic at a basic level. This course meets one of two Diversity (DIV13) requirements. *Also offered through African Studies.*

#### 102. Elementary Arabic. (*with lab*)

This is a continuation of Arabic 101. Students learn to differentiate among verbs, nouns and adjectives and to conjugate verbs in the present and the past. Emphasis is on the four communication skills: reading, listening, writing and speaking. Understanding of more complex elements of Arabic culture and writing is stressed. Prerequisite: ARAB 101 or equivalent. This course meets one of two Diversity (DIV13) requirements. *Also offered through African Studies.*

#### 103. Intermediate Arabic. (*with lab*)

This course is geared toward consolidating skills gained in Arabic 101 and 102 while enhancing the ability to converse and conduct oneself in Arabic. Reading skills are enhanced by exposure to more sophisticated examples of literature. Original written expression is encouraged through composition of short essays. Prerequisite: ARAB 102 or equivalent. *Also offered through African Studies.*

#### 104. Intermediate Arabic. (*with lab*)/LANG 3xxx in English – Arab Society Through Graphic Novels, Literature, Film and Social Media.

This course examines Arabic society through graphic novels, films, cartoons & songs from the Middle East and North Africa (MENA). Special attention will be given to the Arab world, family, personal rights, gender relations, religion, the Arab experience in the U.S., Arab American relations, and the role of the past and of social change. A significant portion of the course is specifically intended to increase students' sensitivity to racial bias and sharpen awareness of multicultural issues. The course material will be explored through films, songs, lectures, and readings in addition to discussions based upon the assigned readings and lectures. The films screened as part of the course will be analyzed as socially produced narratives that reveal some of the central tensions and concerns of the culture from which they

emerged. Students will be introduced to various genres that characterize Arab cinema such as epic, comedy, drama, documentary, and historical among others. The course is offered in English for all SLU students. Students minoring in Arabic will have to register through ARAB104. **Students should complete their written work in the language chosen at registration. This course fulfills the ARTS requirements.**

#### 201. Advanced Arabic.

In this course we focus on Arabic at the advanced level through in-depth examination of grammar, and reading of selected texts to develop the student's ability in the critical oral and written analysis of integral literary texts. Colloquial Arabic will be introduced (Lebanese). Many cultural subjects will be covered as many films will be discussed and analyzed. Offered occasionally.

#### 203. Arab Society through Graphic Novels & Films.

This course examines Arabic society through films, graphic novels, and songs from the Middle East and North Africa (MENA). Special attention will be given to family, personal rights, gender relations, religion, freedom of speech, the Arab experience in the U.S., Arab American relations, and the general stereotypes associated with the region. A good deal of the course is intended to increase students' sensitivity to racial bias and sharpen their awareness of multicultural issues. The course material will be explored through films, songs, graphic novels, readings, and discussions based on the assigned readings and lectures. The films screened as part of the course will be analyzed as socially produced narratives that reveal some of the central tensions and concerns of the culture from which they emerged. Students will be introduced to various genres that characterize Arab cinema, such as epic, comedy, drama, documentary, and historical. This course fulfills the ARTS distribution (2013 curriculum).

#### 350. Teaching Languages.

Designed to help students develop competency in language instruction. **Teaching Languages is offered only for student teaching assistants in the department.** We explore what it means to be part of a communicative classroom; students learn to create pedagogically sound activities that complement the textbook and online materials. Students learn how to integrate available technology into their teaching and create original visual and auditory materials and exercises for use in their own lab sections. Teaching Languages is taught in English and cross-listed among all the languages.

### Chinese

#### 101, 102. Elementary Chinese. *(with lab)*

This is a two-semester sequence providing an introduction to the speaking, reading, writing and oral comprehension of modern Mandarin Chinese. Through this course students are expected to be able to communicate in Mandarin Chinese on a basic level. Class sessions plus lab. Open to students with no prior study of Chinese. *Also offered through Asian Studies.*

#### 103, 104. Intermediate Chinese. *(with lab)*

This is a two-semester sequence in intermediate Mandarin Chinese. The course content stresses all the basic language skills of reading, writing, listening and speaking. Emphasis is on active use of the

students' vocabulary and grammar. The course includes material every week on Chinese geography, history, culture and society. *Also offered through Asian Studies.*

201, 202. Advanced Chinese.

This is a course in advanced Mandarin Chinese. While continuing to consolidate the foundation which students have built in their intermediate Chinese courses, this course seeks to further develop the student's ability in all four skills of the Chinese language to the point where he or she will be able to communicate effectively with native speakers of the language, and become better prepared to read all varieties of authentic modern-language texts, including newspapers and short stories. *Also offered through Asian Studies.*

232. Cultures of China through Fiction and Film.

This course is designed to introduce the history and culture of China from its earliest beginnings to the late 19th century, covering Chinese institutions, philosophical trends, religions, literature, arts, and special topics such as gender and family, love and friendship, dream and soul, among others. Materials include Confucian and Taoist classics, Buddhist scriptures, literary and artistic works and films, as well as modern scholarly publications. All readings are in English. No knowledge about China and Chinese language is required. *Also offered through Asian Studies, and History.*

234. Chinese Literature and Film.

This course provides an overview of Chinese literature and film. The first half surveys traditional Chinese literature with a focus on masterpieces in the golden ages of various genres. The second half introduces modern Chinese literature with a focus on film, including representative works by well-known writers Lu Xun and Ba Jin, and famous film directors such as Zhang Yimou, Chen Kaige, Wang Xiaoshuai, and others. The aim is to enhance students' interests and skills in reading and analysis of Chinese literature and film, and improve students' understanding of the history, society and culture of China. All works are read in English translation. *Also offered through Asian Studies, and Film and Representation Studies.*

489, 490. SYE: Independent Study.

Independent study on advanced Chinese or a topic on Chinese literature and culture for seniors only.

### **English for Speakers of Other Languages (ESOL)**

201. Introduction to American Culture.

In this course, students will focus on English for academic purposes through the study of American culture. This course will address language used in academic assignments and class discussions, expand academic vocabulary, and practice the authentic use of the English language. Students will have the opportunity for additional language support during individual meetings with a conversation partner tutor. Non-native English speakers only.

## 202. Advanced Stylistics.

In this course, students will refine skills related to academic English and will write in different genres while exploring a contemporary conversation. Students will study the authentic use of the English language in reading and writing and will practice advanced academic English concepts and study vocabulary. The course will help prepare students to be successful in their academic career. Non-native English speakers only.

## **TESOL (Teaching English to Speakers of Other Languages).**

LANG 408/EDUC 408. Critical Aspects of Teaching English for Speakers of Other Languages.

In this course, students will critically examine teaching English abroad through project-based learning. While not an ESOL teaching certification course, students will leave this course with a fundamental understanding of and practical applications for teaching ESOL (English for Speakers of Other Languages). The larger goal of this course is to examine trends and issues in the field, to practice writing lesson plans, and teaching those plans, and to highlight the importance of understanding culture, and learner characteristics in planning and teaching. Students will develop an understanding of the complexities of teaching ESOL/EFL and why being an English speaker is not enough of a qualification for success.

## **French**

### 101. Elementary French I. (*with lab*)

Provides an introduction to basic structures and develops skills in speaking, reading, writing and oral comprehension. In class and in the language laboratory, current materials from France and other French-speaking countries familiarize students with aspects of language and contemporary culture. Open to students with little or no prior study of the French language.

### 102. Elementary French II. (*with lab*)

French 102 continues to work on structures of the language and on developing skills in speaking, reading, writing and oral comprehension. In class and in the language laboratory, current materials from France and other French-speaking countries familiarize students with aspects of language and contemporary culture. Prerequisite: French 101 or the equivalent.

### 103. Intermediate French I. (*with lab*)

This two-semester sequence provides a review of basic structures and practice in the skills needed for communication in speaking and writing. The basic text and literary and cultural readings are supplemented by current material from France and other French-speaking countries in the language laboratory. Designed for students with two or more years of high school French who wish to improve their grasp of basic skills and enlarge their working vocabulary. Prerequisite: FR 101, 102 or the equivalent.

### 104. Intermediate French II. (*with lab*)

This course is a continuation of French 103. It continues to provide a review of basic structures and practice in the skills needed for communication in speaking and writing. The basic text and literary and cultural readings are supplemented by current material from France and other French-speaking

countries in the language laboratory. Designed for students with two or more years of high school French who wish to improve their grasp of basic skills and enlarge their working vocabulary. Prerequisite: French 102, 103 or the equivalent.

201. Advanced French.

Review and expansion of the four skills with emphasis on the oral and written expression of ideas in French topics of current interest and cultural significance in the French-speaking world. Materials studied include films, newspaper and magazine articles, songs and literary texts. For students who have completed FR 104, or who have had at least four years of French at the secondary level. *Also offered through European Studies.*

202. Advanced French: Contemporary France.

This course has a dual focus: linguistic and cultural. Students spend only a small part of their time reviewing important grammar points, but much more on areas of language such as vocabulary-building, idiomatic usage, oral expression and writing. The thematic focus is contemporary France. Students learn about the social and political institutions in France, and about current cultural practices. Films, radio, Web sites, cartoons, popular music, newspapers and magazines expand the study of French society and language. Students completing FR 201 usually enroll in FR 202 in the spring semester. FR 201 is *not* a prerequisite for this course. *Also offered through European Studies.*

227. Current Francophone Writing and Culture.

This course provides a look at France and French-speaking countries today through works of literature and other art and media (film, music, television, etc.) created within the past seven to ten years. Open to students having completed FR 202 or the equivalent. *Also offered through European Studies.*

229. Reading the Congo: History and Representations.

In this course, in English, we will explore the different representations of Democratic Republic of Congo, through novels, historical accounts, ethnography, movies or graphic novels. This region has been subjected to various types of cruelty and oppression, since the Belgium colonization. Works studied include Conrad's *Heart of Darkness*, excerpts from Hochschild's *King Leopold's Ghost*; Raoul Peck's film *Lumumba* and Mweze Ngangura's film *Identity Pieces*; the novel *Life and a Half* by Sony Labou Tansi, etc. The goals of the course are not only to explore Congo's history and culture, but also to think critically about the way it has been imagined and represented from the 19th century to the present day.

235. Paris.

The subject of this course is culture and history of Paris. Students examine not only how the city appears in literature and film, but also how the urban space grew and changed across more than two millennia since the first inhabitants settled on the Ile de la Cité. Maps, paintings, sketches and other historical documents are consulted. Students work on a variety of other texts as well: prose fiction (a detective novel and novellas), lyrics (poetry and popular song), films and histories. All readings, films, writing and classroom discussions are in French.

263. School Days.

Through memoirs, fiction, children's literature and film, this course offers a glimpse of childhood and adolescent experience of school and an opportunity to study education in France and the French-speaking world. Open to students having completed FR 202 or the equivalent. *Also offered through European Studies.*

**3000-3999. Special Topics.**

The content of each course or section of these 200-level special topics courses varies and will be announced each semester.

LANG 350. Teaching Languages.

Designed to help students develop competency in language instruction. **Teaching Languages is offered only for student teaching assistants in the department.** We explore what it means to be part of a communicative classroom; students learn to create pedagogically sound activities that complement the textbook and online materials. Students learn how to integrate available technology into their teaching and create original visual and auditory materials and exercises for use in their own lab sections. Teaching Languages is taught in English and cross-listed among all the languages.

403. Modern Prose Fiction in France.

This course examines the themes, techniques and sociopolitical contexts of the 20th-century novel. Choice of authors varies from year to year, but has included Gide, Proust, Sartre, Camus, Malraux, Robbe-Grillet, Tournier, Modiano, Duras and others. *Also offered through European Studies.*

404. French Film.

This course combines an historical view of the French cinema, an introduction to the techniques of film analysis and an examination of the major issues in film theory. Topics include the pioneers of cinema, the "classical" films of the 1930s and '40s, the films of the "nouvelle vague" in the '50s and '60s and recent trends in film production. The work of filmmakers such as Renoir, Clouzot, Truffaut, Beineix, Godard and Resnais is studied. *Also offered through Film and Representation Studies and European Studies.*

413. The Theater of the Classical Age.

This course studies selected plays of Corneille, Moliere, Racine, Marivaux and Beaumarchais. It examines dramatic theory and the characteristics of Classical and Baroque theatre, as well as the cultural milieu and arts in 17th and 18th-century France. *Also offered through European Studies.*

425. Exile and Identity in the Francophone African Novel.

This course in French explores the themes of identity and exile in the novels, films and graphic novels from writers and filmmakers from Francophone Africa such as Cheikh Hamidou Kane, Léonora Miano, Fatou Diome or Djibril Diop Mambéty and Rachid Bouchareb. Students will discuss the role of race,

traditional culture, nationality, gender in the construction of national identity. This course is in French.  
*Also offered through African Studies*

428. French Women Writers.

This course offers the opportunity to study and appreciate the contribution to literature and thought, including feminist theory, by women writers from France and French-speaking countries. Works by writers such as George Sand, Colette, Beauvoir, Weil, Djébar and Condé are considered, along with films by Varda, Denis and others. *Also offered through European Studies.*

489, 490. SYE: Independent Study.

For senior students specially qualified. Offered on demand. Also offered through Caribbean, Latin American and Latino Studies.

497, 498. SYE: Honors Project.

See Honors in the introductory section on departmental curriculum.

Study in France.

See the International and Intercultural Studies section of this *Catalog*.

## German

101, 102. Elementary German (*with lab*).

At the elementary level of the language courses sequence (GER 101 in the fall and 102 in the spring), students are gradually immersed into the German-speaking world through activities and assignments targeted at practicing the four language skills: speaking, listening, reading, and writing. The courses also provide a solid grammar basis on which the students build up to the higher levels. The elementary language courses introduce culture of the German-speaking countries both implicitly and explicitly. The former proceeds through grammar exercises with elements of cultural distinctions (e.g., distinction between formal/informal) and thorough vocabulary referring to specific cultural information and practices, such as geography, family, school, etc. The cultural practices in the different German-speaking countries (Germany, Austria, Switzerland) are addressed explicitly in different types of assignments and so are the cultural differences between the American and the German-language cultures. Class sessions plus lab.

103, 104. Intermediate German (*with lab*).

In the intermediate language courses sequence in German (GER 103 in the fall and 104 in the spring), the complexity of the assignments and activities in all four language skills increases significantly, requiring more intensive work from the students, which brings about greater proficiency in all four language skills. The students respond to more complex questions regarding more abstract concepts and use more sophisticated grammar structures. The texts at the intermediate levels help the students adjust to more complicated structures and vocabulary, greater language fluency, and more complex

cultural input. The cultural nuances and differences within the German-language cultures are addressed and discussed explicitly and at a higher level than in the previous courses. The discussions deriving from the readings in the textbook and two films screened during the course, include politics, specific past and contemporaneous cultural production (plastic arts, music, literature), and history. Class sessions plus lab.

#### 201, 202. Advanced German.

In the advanced level courses in German Studies (201 in the fall and 202 in the spring) we move beyond the traditional approach to language courses based on language textbooks and use other types of texts and media. At this level it is assumed that the students have well-developed language skills. GER 201 teaches German language, culture, history, and politics of the German-speaking countries in the twentieth and the twenty-first centuries through film. Students practice comprehension of complex questions and film perception as well as use of more sophisticated and specific vocabulary and grammar structures. This course focuses very strongly on writing skills and includes more complex writing assignments than the previous levels. GER 202 teaches German language, culture, history, and politics of the German-speaking countries in the twentieth and twenty-first centuries through the genres of short story and poetry. The course has a strong focus on reading comprehension, writing, and discussion. The students read original literary texts in German, which are carefully chosen to challenge them reasonably and enrich their vocabulary, and practice their reception of literary texts beyond mere language comprehension and towards understanding of the literary concepts and structures. In the writing assignments the students learn to analyze literary texts, structure and develop an argument, and improve their writing skills and styles in German.

#### 282. New German Cinema.

Taught in English. This course introduces students to the cultural, political, and formal study of West German filmmaking since the 1960s in direct comparison with current popular cinema, East German film, and the lasting legacies of New German Cinema today. Topics include left-wing terrorism, feminist politics, immigration, colonialism, Germany's Nazi past, and Cold War divisions. Films by Herzog, Wenders, von Trotta, Fassbinder, Schlöndorff, Akin, Maccarone, Petzold, and others. This course may also be taken for German-language credit by completing select assignments in German. *Also offered through Film and Representation Studies, as well as European Studies.*

#### 283. Berlin Hollywood.

Taught in English. Hollywood's fascination with modern German history is evident in the constant stream of films about the Holocaust, Nazism, and World War II. With the rise of Hitler, many German and Austrian directors, actors, and writers also fled Europe for southern California and helped shape the political, cultural, and stylistic direction of Hollywood. This course explores the intersection of German and American history and film culture from the 1930s to the present with a focus on World War II and covers key theories of modernism, mass culture, historical memory, and representations of the Holocaust. Films and texts by Lang, Riefenstahl, Chaplin, Wilder, Brecht, Adorno, Staudte, Spielberg, Verhoeven, Coen Brothers, and Tarantino. This course may also be taken for German-language credit by completing select assignments in German. *Also offered through Film and Representation Studies.*

### 3000-3999. Special Topics.

The content of each course or section of these 200-level special topics courses varies and will be announced each semester.

### LANG 350. Teaching Languages.

Designed to help students develop competency in language instruction. **Teaching Languages is offered only for student teaching assistants in the department.** We explore what it means to be part of a communicative classroom; students learn to create pedagogically sound activities that complement the textbook and online materials. Students learn how to integrate available technology into their teaching and create original visual and auditory materials and exercises for use in their own lab sections. Teaching Languages is taught in English and cross-listed among all the languages.

### 489, 490. SYE: Independent Study.

Independent study is intended for exceptionally qualified students only. Permission of the instructor is required. See application procedure on the home page of the departmental Web site.

### Study in Austria and Other Places through ISEP.

See the International and Intercultural Studies section of this *Catalog*.

## Italian

### 101. Elementary Italian I. *(with lab)*

Provides an introduction to basic structures and develops skills in speaking, reading, writing and oral comprehension. In class and in the language laboratory, current materials from Italy are used to familiarize students with aspects of language and contemporary culture. ITAL 101 (offered in the fall semester) is open to students with little or no prior study of the Italian language.

### 102. Elementary Italian II. *(with lab)*

This course continues to provide an introduction to basic structures and develops skills in speaking, reading, writing and oral comprehension. In class and in the language laboratory, current materials from Italy are used to familiarize students with aspects of language and contemporary culture. Prerequisite: ITAL101 or the equivalent.

### 103. Intermediate Italian I. *(with lab)*

This course is an intermediate level four-skill course designed for students who have successfully completed ITAL 102 at St. Lawrence or who enter with several years of high school Italian. The course provides a review of Italian grammar with a focus on oral communication and listening comprehension while exposing students to culturally authentic content. Students continue to practice reading skills by working with literary and non-literary texts, and writing skills through creating writing. Movies and visual arts material facilitate students' exposure to the various aspects of contemporary Italy and give them insight into its culture and social structures. **These courses fulfill ARTS distribution requirement.**

104. Intermediate Italian II (*with lab*)/LANG 3xxx in English - Italian Culture through Film.

This course examines Italian society and culture through films. Special attention will be given to Italian food, art, landscape, design, and fashion. A significant portion of the course is intended to discuss multicultural issues. The course material will be explored through films, songs, lectures, and readings in addition to discussions based upon the assigned readings and lectures. The course is offered in English for all SLU students. Students minoring in Italian will have to register through ITAL104. **Students should complete their written work in the language chosen at registration. This course fulfills the ARTS requirements.**

201. Language through Film and Visual Culture.

Designed for students who have previous knowledge of Italian at a 102 level or above, but wish to engage with Italian language and culture through film, creative writing and visual culture. The creative component allows students of different level to perfect their Italian regardless of starting level, while the visual and cinematic material enhances their awareness of the process of artistic production and exposes them to the history of Italian art and cinema. ***This course fulfills ARTS distribution requirement.***

350. Teaching Languages.

Designed to help students develop competency in language instruction. **Teaching Languages is offered only for student teaching assistants in the department.** We explore what it means to be part of a communicative classroom; students learn to create pedagogically sound activities that complement the textbook and online materials. Students learn how to integrate available technology into their teaching and create original visual and auditory materials and exercises for use in their own lab sections. Teaching Languages is taught in English and cross-listed among all the languages.

## Spanish

101, 102. Elementary Spanish. (*with lab*)

The principal goal is the acquisition of a basic level of communicative ability in Spanish. Video, film, audiotapes and the Internet provide current materials from Hispanic America, Spain and the United States Latino community to enhance language learning and knowledge of the culture. Language laboratory activities advance conversational skills and oral comprehension. Open to students with little or no prior study of the language.

103, 104. Intermediate Spanish. (*with lab*)

Spoken and written Spanish are reinforced by a review of grammar and idiomatic strategies for self-expression. The course includes use of videos, music, literature, news broadcasts and the Internet as a means for understanding the contemporary culture of Hispanic America and Spain. Materials in the language laboratory facilitate conversation and increased oral comprehension. Prerequisite: SPAN 101, 102 or equivalent. *Also offered through Caribbean, Latin American and Latino Studies.*

201. Advanced Spanish.

Review and expansion of the four skills, with emphasis on the oral and written expression of ideas in Spanish on topics of current interest and cultural significance in the Spanish-speaking world. Materials studied include journalistic texts, videos, audiotapes, songs and literary works. For students who have completed SPAN 103, 104, or who have four years or more of Spanish at the secondary level. *Also offered through Caribbean, Latin American and Latino Studies.*

202. Hispanic Cultural Studies.

A language course with the aim of acquainting students with current Hispanic culture through the analysis of literary texts, films, advertisements and other materials drawn from Spain, Hispanic America and the Latino community in the United States. Includes a research project on a cultural topic. This course fulfills the diversity distribution requirement. *Also offered through Caribbean, Latin American and Latino Studies.*

203 Spain Through Almodóvar's Cinema.

This class examines how Spain is represented in films by the Spanish director Pedro Almodóvar. Almodóvar's films roughly span the years of Spain's post dictatorship (1980-present) and must be situated within this context of political and cultural transformation. The films form the basis of conversation and research on themes related to Spanish history and contemporary society, such as: Customs and traditions, family, religion, rural vs. urban, and gender roles as portrayed in Almodóvar's films. The class is conducted entirely in Spanish. Fulfills HU Distribution (2013 curriculum). Prerequisite: Span 201.

213. Introduction to the Cultures of Spain.

A study of the development of the cultures of Spain through history, art, music and literature. The course includes an analysis of Spanish cultural pluralism and its origins. Sources include literary works, texts on aspects of Spanish culture and history, videos and film, examples of Spanish art and music and material drawn from the Internet. Not open to students who have completed a more advanced course. Taught in Spanish, this course fulfills the diversity and humanities distribution requirement. *Also offered through European Studies.*

221. Latin America in Film.

This class examines how Latin America is represented in films by directors from Hispanic America, Brazil, Europe and the United States. The films form the basis of conversation and research on themes related to contemporary history, inter-ethnic conflict, traditional gender roles and immigration. The class is conducted entirely in Spanish, though some of the theoretical and technical readings on film are in English. This course fulfills the diversity and humanities distribution requirement. *Also offered through Caribbean, Latin American and Latino Studies.*

246. Oral Expression in Spanish.

Analysis of contemporary oral usage through the study of film, video and audio materials as well as printed texts. Advanced pronunciation practice. Study of techniques of oral presentation. Assignments are designed to promote the development of persuasive skills and include formal debates on contemporary issues and other public speaking activities. *Also offered through Caribbean, Latin American and Latino Studies.*

3000-3999. Special Topics.

The content of each course or section of these 200-level special topics courses varies and will be announced each semester.

350. Teaching Languages.

Designed to help students develop competency in language instruction. **Teaching Languages is offered only for student teaching assistants in the department.** We explore what it means to be part of a communicative classroom; students learn to create pedagogically sound activities that complement the textbook and online materials. Students learn how to integrate available technology into their teaching and create original visual and auditory materials and exercises for use in their own lab sections. Teaching Languages is taught in English and cross-listed among all the languages.

4000-4999. Special Topics.

Designed for students who have completed Spanish 201, 202, special topics courses offer the opportunity to study specific topics in Hispanic culture. The content of each course or section of these 300- or 400-level special topics courses varies and will be announced each semester.

423. Introduction to Spanish Literature. (equivalent to SPAN 323)

An overview of the literature of the Spanish people. Readings from the major periods, from the earliest literature to the present. Authors studied include Cervantes, Calderón, Federico García Lorca and Carmen Martín Gaité. The works are treated as representative, thematically and aesthetically, of their respective ages and the traditions of their genre. *Also offered through European Studies.*

444. Survey of Latin American Literature. (equivalent to 344S)

Indigenous oral traditions and texts from the period prior to the arrival of the Europeans are examined, as are works from the colonial period to the present. Authors studied from the colonial period include Bernal Díaz del Castillo, Bartolomé de las Casas and Sor Juana Inés de la Cruz. Contemporary authors include Borges, García Márquez, Allende and Rigoberta Menchú. *Also offered through Caribbean, Latin American and Latino Studies.*

445. Literary Translation: Theory and Practice.

In this workshop, students use translation as a tool to learn how to express themselves more effectively in both English and Spanish. Theorists such as Octavio Paz, José Ortega y Gasset, Willis Barnstone, Carol Maier, Walter Benjamin, Tejaswini Niranjana, and others, help illuminate the practice of translation in a variety of genres that include poetry, autobiography, book reviews and subtitling of films. For students with considerable background in Spanish, including, preferably, residence in a Spanish-speaking country. *Also offered through Caribbean, Latin American and Latino Studies.*

489, 490. SYE: Independent Study.

Also offered through Caribbean, Latin American and Latino Studies.

497,498. SYE: Honors Project.

Working closely with a faculty member, the student develops a project related to Spanish-language literature or culture. Projects may include translations from Spanish to English and they may be interdisciplinary. Students are encouraged to use a variety of media in their projects and, if they participate in a St. Lawrence program in Costa Rica or Spain, to relate their projects to that experience. For additional information, see the description of Honors in the introductory section of the departmental curriculum.

Study in Spain. (<http://www.stlawu.edu/ciis/spain>)

The following Spanish courses are offered in the Madrid program. Courses are also available in anthropology, economics, English, gender studies, global studies, government, history, fine arts and psychology, either as regular offerings or by special arrangement.

## FALL

300S. Masters of the Spanish School: El Greco, Velázquez, Goya and Picasso.

A study of the work of four major Spanish painters, each of whom is considered the greatest painter of his period in Spain: El Greco (Renaissance), Velázquez (Baroque), Goya (Neoclassicism/Romanticism), Picasso (20th century). The course includes a weekly class in one of the museums in Madrid such as the Prado, the Reina Sofia and the Thyssen collection.

301S. Advanced Practical Spanish.

A unit course emphasizing spoken and written Spanish skills. The course is designed to help students achieve and maintain the linguistic skills needed for the program's other courses and for personal and professional activities. Required for program participants.

312S. Migrations and Cultural Diversity in Contemporary Spain.

Students become familiar with migration and cultural diversity in Spanish society from an anthropological and socio-cultural perspective. The course introduces basic notions of socio-cultural

anthropology in order to understand contemporary migrations, describe characteristics and problems of Spanish society in the framework of cultural diversity and apply methodological tools of anthropology to present-day Spain. Field work includes visits to public organizations, neighborhoods, public spaces, commercial establishments and cultural institutions.

322S. International Economics.

The theory of international trade and finance and its application to current policy problems such as protection, intervention in foreign exchange markets, international debt and foreign investment. This course is accepted for major credit. Prerequisite: ECON, 251, 252.

323S. Introduction to Spanish Literature. (equivalent to SPAN 423 and should only be taken once, either in Spain or on the SLU campus)

See description for SPAN 423.

328S. Nature and Culture in Spain: Interpreting the Landscapes.

One of the best ways to learn about a country is to travel perceptively through its countryside, villages and cities. Landscapes are a good indicator of natural and cultural diversity. In observing human interaction with the physical environment, students will understand better how nature, communities, and ways of life developed over time. This interdisciplinary course will contextualize the program field trips.

335S. The Spanish Village.

Through readings, interviews and detailed personal observation, students investigate the economic, political and social structure of rural Spain. Includes residence in a village and seminars in Segovia. Required for fall semester program participants.

358S. The Madrid Stage.

A study of the contemporary theater in Spain with a focus on the current season through readings, interviews, discussions and weekly theater attendance.

367S. Political Process in Contemporary Spain.

Focus is on the various political systems (absolute monarchy, republic, dictatorship, constitutional monarchy) that have characterized Spanish politics during the 20th century. The transition from dictatorship to democracy and the salient elements of the current system are emphasized. Arrangements can be made to take this as a history credit.

**SPRING**

302S. Advanced Practical Spanish.

Continuation of SPAN 301S. Required for program participants.

303S. History of Spanish Art.

An overview of Spanish art from prehistoric cave painting to 20th century masters such as Picasso and Miro. Architectural monuments, sculptures and paintings are studied.

330S. Politics and Governments of Western Democracies.

A study of the history and present structure of several European democracies and the United States. The class includes a segment on the European Union. This course is accepted for government majors.

338S. Introduction to Spain. (0.5 unit)

An introduction to Spain for students who join the program in the second semester. During the first two weeks of the month-long program, students live in small cities in La Mancha, where they investigate the economic, political and social structure of the area through readings, interviews and detailed personal observation. The second two weeks are spent in Madrid with daily language classes and sessions on Spanish art, culture and government.

342S. Spanish Novel of the 20th Century.

An investigation of narrative prose from the Generation of '98 (Unamuno) to the present (Cela, Martin Gaité, Llamazares) as representative of the principal aesthetic and historical movements of the century.

344S. Survey of Latin American Literature. (equivalent to SPAN 444 and should only be taken once, either in Spain or on the SLU campus)

See description above for SPAN 444.

365S. The Spanish Economy, the EU and the Latin American Challenge.

This course analyzes the possibilities for economic cooperation between the European Union and Spain, and Latin American economies. Study focuses on the challenges associated with and the important structural changes that are taking place in Europe as well as Latin America in the context of the growing integration of both regions in international markets. Prerequisite: ECON 100

383S. History of an Emancipation: Women in Spain 1750-1995.

A study of women's issues—particularly labor, education and the right to vote—in Spain from the Spanish Enlightenment through Francoism to Democratic Spain.

ND 480. Internship.

For additional information on the program, see the program webpage:

<https://www.stlawu.edu/offices/ciis/spain>. Program brochures are also available at the Center for International and Intercultural Studies.

## **Swahili**

101, 102. Elementary Swahili. (*with lab*)

The courses incorporate elements of Swahili language and East African culture. The focus is on acquiring basic Swahili grammar, writing, listening, reading and communication skills. The content addresses cultural and social aspects (music, media, etc.) of East African society. There will be student performances of cultural insights of the people in East Africa. This course is open to any student who wants to study a foreign language or Africa and who is interested in the Kenya program. Two one-hour language labs every week enhance oral practice and are also used for remedial work. *Also offered through African Studies.*

3000-3999. Special Topics.

The content of each course or section of these 200-level special topics courses varies and will be announced each semester.

489, 490. SYE: Independent Study.

490 also offered through African Studies.