



**TRINITY UNIVERSITY**

# Course of Study Bulletin Courses of Study 2018-2019

Undergraduate and Graduate Studies Effective June 2018 for the 150th Academic Year.

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# CoSB Guidelines

## Academic Regulations

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## Credit Hours

One credit hour represents a minimum of three hours of student academic work per week for approximately fifteen weeks for one semester, or an equivalent amount of student academic work distributed over a different time period. Student academic work may include lectures, seminars, tutorials, applied and studio instruction, laboratories, supervised fieldwork, as well as reading, writing, homework, research, community-engaged experiences, practica, rehearsals, and performances.

The nature of the three hours of expected academic work and the way in which that work will be evaluated by faculty will be documented in proposals to the University Curriculum Council for new or revised courses, and will be

included in all course syllabi.

A minimum of 124 credit hours is required for a baccalaureate degree in most majors, except in Engineering Science (129 credit hours), in Choral or Instrumental Music (132 credit hours), and in Music Performance or Composition (141 credit hours).

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## Academic Workload

Payment of full tuition permits an enrollment of 12-18 hours per semester. An undergraduate student is regarded as being enrolled full time if the student is registered for 12 credit hours of course work in the fall and spring semesters, or for six hours of course work in the summer. Students who wish to take more than 18 hours during one semester, or 36 credit hours in one nine-month academic year, must receive a waiver of the university policy from the Office of Academic Affairs (prior approval needed from faculty adviser).

An undergraduate student in the final semester prior to his or her graduation is regarded as being enrolled full time if the student is registered for one or more credit hours of coursework representing the remaining degree requirement.

To be considered full time for financial aid purposes, an undergraduate must be enrolled in at least 12 hours at the end of the add/drop period of each enrollment term (summer, fall, or spring), including the final semester prior to his or her graduation. Financial aid may be available for undergraduate students who enroll for fewer than 12 hours per term.

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## Undergraduate Enrollment in Graduate Courses

Students who have nearly completed the requirements for a bachelor's degree at Trinity are occasionally permitted to enroll for a limited number of graduate courses.

Undergraduate students at Trinity will be permitted to enroll in 5000-level courses and receive credit toward their baccalaureate degree under the following conditions: In order to qualify, a student must be within 30 hours of graduation, have an overall grade point average of 3.50, and an average of 3.75 in his/her major field. The student is required to have approval from the chair of his/her major department and also approval from the Vice President for Academic Affairs. If a student wishes to enroll in a course in a department other than his/her major field, additional approval from the chair of the department offering the course is needed. Students are limited to one 5000-level course each semester and are required to have separate approval for each semester in which they wish to take a graduate course. They are not required to apply for graduate admission. The graduate credit hours may not be applied to both the graduate and undergraduate degrees.

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# Classification of Students

Students are classified on the following basis:

Graduate	Completion or near completion of the requirements for a baccalaureate degree and admission to one or more graduate classes for graduate credit.
Senior	A minimum of 88 credit hours on record.
Junior	A minimum of 58 credit hours on record.
Sophomore	A minimum of 26 credit hours on record.
First Year	Fulfillment of entrance requirements and less than 26 credit hours on record.
Postgraduate	Baccalaureate degree and enrollment in undergraduate courses for undergraduate credit.
Special	A student taking courses at Trinity with temporary permission and not a candidate for a degree from Trinity.
Noncredit	Recipient of full instructional attention and participation in class without academic credit. No course taken as noncredit may subsequently count for credit unless the course is repeated.

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# Grades

## GRADING SYSTEM

The grading system at Trinity involves letter grades which are assigned a quality point value per credit hour as follows:

A	Excellent	4.000
A-		3.667
B+		3.333
B	Good	3.000
B-		2.667
C+		2.333

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C	Adequate	2.000
C-		1.667
D+	Poor	1.333
D		1.000
F	Failure	0.000
I		Incomplete
W		Withdrew from Course
PP		Passing in a pass/fail course
FF		Failing in a pass/fail course
PR		In progress (thesis course only)

All A, B, C, and D grades are passing grades. A grade of W is not included in computing grade averages. Grades of I and PR are not included in the grade average. If the student is unable to finish the thesis during the second semester, the thesis adviser upon evaluation of the work the student has completed to date can change the first semester "PR" grade to "PP" or "FF". Courses in which F and FF grades are received must be repeated at Trinity to receive credit.

I, PR, W, FF and PP grades carry no grade point average. Hours earned with PP grade will count toward the student's total hours for graduation.

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## Grade Point Average

The student's overall evaluation is stated in terms of a grade point average. This average is obtained by dividing the number of grade points earned by the number of hours of work attempted in courses which carry grade points. The student's cumulative grade average is obtained by dividing all grade points earned throughout enrollment at Trinity University by the number of credit hours attempted in courses that carry grade points. Only grades in courses taken in residence at Trinity University will factor into the grade point average.

If a student repeats a course at Trinity, all grades for the course will be used in computing the grade average. Only courses that are specifically designated may be repeated for credit. All other repeated courses will be shown on the permanent record as repeated with grades listed and duplicate credit, if any, deleted.

## Grades in Major or Minor

As part of a student's degree requirements, a cumulative grade point average of at least 2.0 is required on all courses taken in each of the student's major or minor disciplines.

A course taken for a student's major (minor) in which the student earns a grade of D (for example) satisfies the requirements for the major (minor), but the student must have an overall average on all courses for the major (minor) of 2.0. Should the student choose to repeat a course in which a grade of D (for example) was earned, both grades are included in determining the grade point average in the major (minor). If a student is a double major, each major is considered separately and without regard to the other major in determining whether graduation requirements are satisfied. If a course, such as a cross-listed course, is required for both majors, it is included in the grade point calculation for each major.

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## Grades for Prerequisite Courses

A student may satisfy the prerequisites for any course at Trinity only by receiving a grade of C- or higher in each of the prerequisite courses.

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## Grade Reports

Reports of grades for all students are available online from the Trinity University website at the close of each semester. Hard copies of grade reports are available from the Office of the Registrar upon request by the student. The semester grades become a part of the student's permanent record. Mid-semester grades of C- and lower are not permanently recorded but are posted online for information and guidance.

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## Pass/Fail Option

A student may register for an elective course on a Pass/Fail basis and not be in competition with majors in that field for a course grade. This option is intended to encourage the student to explore new academic areas without endangering the student's grade average.

Limitations on Pass/Fail registration are:

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- A. Only one course per semester may be taken Pass/Fail.
- B. No course counted for the major or minor and no course being used to meet a Common Curriculum or Pathways requirement may be taken Pass/Fail unless the course is offered exclusively on a Pass/Fail basis.
- C. Pass/Fail courses must be listed at the time of registration and may not be changed after the date specified in the academic calendar (15 days from start of classes) to a letter grade basis; conversely, courses taken for a letter grade may not be changed subsequently to Pass/Fail after the 15th class day.

Not all departments permit Pass/Fail registration. Courses which may not be taken Pass/Fail are notated in the Courses of Study Bulletin.

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## Incomplete Grades

An I, meaning “incomplete,” indicates that a student has done work of a passing grade in a course but has failed to do some portion of the required work because of an emergency. An I grade may not be given solely to allow additional time to complete a course. It is the student’s responsibility to have this deficiency removed before the end of the first semester following the time of receiving the grade of I or the grade will be changed to F.

If no change has been made by the instructor after one semester has elapsed, the Registrar is authorized to change all grades of I to F.

If the instructor involved is no longer connected with Trinity University and the Registrar is unable to communicate with the instructor, the Registrar will record an automatic F.

For the purposes of determining scholastic probation, incomplete grades will not be counted as hours attempted.

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## Repeating of Courses

Any student who fails a course at Trinity University and then elects to repeat that course must do so at Trinity University. All of the grades for repeated courses will be included in the cumulative grade point average. Credit will only be awarded once for repeated courses unless the course has been designed as “may be repeated for credit.”

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# Grade Appeals

Trinity University recognizes that students are responsible for maintaining standards of academic performance established for each course in which they are enrolled. However, the University also recognizes that students should have protection through orderly procedures against prejudicial or capricious academic evaluation. In all cases, the burden of proof rests on the student initiating the appeal.

The procedures for student appeal of semester grades contain the presumption that student grades are the responsibility of the course instructor. As a matter of academic principle, the process of appeal remains in the hands of the teaching faculty. Except for the actions specified in Section 2 and Section 5 below, members of the Administration are not involved in the grade appeal process. Following the decision involved in each step of this appeal process, if the student wishes to appeal to the next level he or she must notify the appropriate party in writing of his or her intent to do so within the first two weeks of the following semester (i.e., fall, spring, summer). (If, in the following semester, the student will be studying away from Trinity or the faculty member will be on leave, then the request for appeal still must be filed within two weeks, but the appeals process will be deferred until the student and faculty member return to Trinity.)

1. To initiate the appeal of a semester grade, the student will speak to or notify the instructor of his or her appeal. Upon initiation of the appeals process (and upon return of both student and faculty member to Trinity, if the appeals process was deferred), the instructor has one week to notify the student of the outcome of his or her review of the grade. If the student remains convinced that the contested grade results from inappropriate or mistaken evaluation of a course grade, then the student may proceed to step two below.
2. To initiate step two, the student will notify the instructor's departmental Chair (or acting department Chair) and explain in writing the grounds on which an appeal is being sought; the instructor will receive a copy of this statement. The student must request the appeal and present the grounds for it no later than the tenth class day of the succeeding Fall or Spring semester. The chair will attempt to mediate a discussion between the student and the instructor to clarify the matter and suggest possible resolutions. If the Chair happens also to be the instructor involved, then the student may request that the Associate Vice President for Academic Affairs: Student Academic Issues and Retention ask another faculty member of the department to receive the student's appeal.
3. If this mediation is unsuccessful, the Chair (or the Chair's substitute) will appoint two tenured members of the department to serve as a review committee, and will notify the student and the instructor of this action. In the case of a General Education or cross-listed course, the instructor's Department will serve as the site for the appeals process. If the student is a major or minor in the Department, the student may ask his or her adviser to be an additional member of the committee. If a small department cannot provide two eligible faculty members to serve on the committee, then the Chair (or the Chair's substitute) will ask a faculty member from a department similar in curriculum and academic evaluation to serve on this committee. Departmental review committees may be convened only during an academic semester. The departmental review committee will receive written statements from both the student and the instructor, as well as copies of any graded work involved. In addition, both the student and the instructor (and the student's academic adviser, if requested) may be present for the duration of the hearing (prior to voting),

during which both parties may offer clarifying statements. The department Chair will also be present at the meeting, but will not be involved in the determination of the appeal. If, after considering these statements, the committee decides that there has been no breach of proper or stated procedure in the determination of the grade, the Chair (or the Chair's substitute) will give written notification of this decision to the student and the instructor. However, if the departmental committee determines that there has been an improper evaluation, the Chair (or the Chair's substitute) shall advise the instructor to reconsider the student's semester grade in a manner consistent with proper and stated procedures. If the instructor rejects this advice or fails to comply in a manner satisfactory to the committee, then the committee may undertake an evaluation of the student work in question and assign the grade it deems appropriate.

4. If either the student or the instructor contests the decision of the departmental committee, the student or the instructor may pursue a further appeal. The student or the instructor will submit a written statement to the Chair of the Faculty Senate who, with the advice and consent of the Chair of the University Curriculum Council, will appoint three members of the faculty from outside the department in question. All three members of this Faculty Grade Appeals Committee should come from one or more departments similar to the instructor's department in terms of curriculum and student evaluation. The findings of this committee will determine the final semester grade.
5. If either the student or the instructor contests the decision of the Faculty Grade Appeals Committee, the appellant may petition the Vice President for Academic Affairs for further consideration, who may then rule in one of three ways, the outcome of which will conclude the University process of grade appeal:
  - A. That the decision of the Faculty Grade Appeals Committee will stand as rendered;
  - B. That the Faculty Grade Appeals Committee reconsider its findings and render a decision based on the reconsideration; or
  - C. That the Chair of the Faculty Senate, with the advice and consent of the Chair of the University Curriculum Council, appoint a new Faculty Grade Appeals Committee, composed of three tenured faculty members who have not previously participated in the appeal. This committee will hear the appeal and render a final judgment.

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## Dean's List

In order to merit the honor of being placed on the Dean's List, a student must have completed 15 or more grade point carrying hours of credit in one semester and have earned a grade point average of 3.65 or above. Names of students achieving this distinction are published at the close of each semester.

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# Access to Records

The University complies with the provisions of Public Law 93-380, the Family Educational Rights and Privacy Act. Prescribed educational records of students are open to their inspection upon formal request, in accordance with federal regulations. Every effort is made, within the letter and the spirit of the law, to prevent release of data and records to third parties, except upon specific request of the student.

Requests to inspect records should be addressed to the appropriate University official as follows:

Academic Records	Registrar
Personal record of students	Associate Vice President for Student Affairs
Teacher education records	Chair, Department of Education
Financial aid records	Director of Financial Aid
Financial records	Associate Vice President for Finance
Graduate personal records	Chair of the department of graduate major

Letters of recommendation and student rating sheets supplied in the admission process are used as working papers only and do not become a part of the permanent educational record of the student.

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# Transcripts of Credit

Transcripts of credit will be issued by the Registrar to all students and former students requesting them, subject to certain conditions. One of these is that all amounts owed to the University must be paid. Official transcripts of credits will be forwarded directly to the student or to a recipient designated by the student.

Because of limitations posed by privacy laws, transcript requests should be made in writing.

As a courtesy to current and former students, official transcripts will normally be prepared at no charge. Transcripts usually require three full working days to be prepared and mailed. Rush delivery requests are accepted but will incur a service fee of \$10 plus any additional postage. At the end of a term, ten working days after the date grades are due may be required to issue transcripts including current grades and graduation information.

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# Academic Standing

## Good Academic Standing

Good academic standing refers to the academic progress of students who are not on probation or on academic dismissal. The minimum requirements for good academic standing are as follows:

- A. 1.80 cumulative GPA for first semester students who have attempted at least 12 credit hours.
- B. 2.00 cumulative GPA for students beyond the first semester who have attempted more than 12 credit hours.

## Satisfactory Academic Progress

- I. Students who carry a full load of courses are expected to make satisfactory progress toward completion of a degree within a reasonable time. The standards for Satisfactory Academic Progress (SAP) are as follows:
  - A. Students must average at least 12 hours per semester.
  - B. Students must complete at least 24 hours per academic year unless on an officially approved leave.
  - C. Students who enroll mid-year must complete at least 12 hours prior to the start of the fall semester.
  - D. Summer hours earned after matriculation may be included in the calculation of SAP.
  - E. Credit by examination and transfer hours earned prior to matriculation may not be included in the calculation of SAP.

### II. Student-Athletes

For students who officially represent the University in intercollegiate athletics sanctioned by the National Collegiate Athletics Association, Satisfactory Academic Progress will be evaluated by the Registrar once a year at the end of the Spring semester. To be eligible to participate in NCAA-sanctioned athletics during a given academic year, student-athletes must satisfy the standards for SAP prior to the beginning of the Fall semester; they must be enrolled for at least 12 hours during the semester in which competition takes place; and they must be in good academic standing.

### III. Transfer Students

- A. A transfer student will be expected to fulfill the standards for Satisfactory Academic Progress (SAP) as stated above in Section I.
- B. A transfer student's good academic standing will be measured only on grades earned at Trinity University.

# Satisfactory Progress Requirements for Undergraduate Financial and Recipients

In order to receive financial assistance, a student must be making satisfactory academic progress toward a degree in accordance with policies established by Trinity University as required by the Department of Education. For a full definition of satisfactory academic progress for financial aid, please consult with Student Financial Services.

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## Probation and Dismissal

Only students whose scholastic averages are maintained at or above good standing will be permitted to continue in the University.

Student records are reviewed by the Committee on Academic Standing at the end of each semester and the summer session. Students are placed on probation when grade averages drop below the following standards:

1.80 cumulative – for the first semester students who have attempted at least 12 credit hours.

2.00 cumulative – for students beyond the first semester who have attempted more than 12 credit hours.

Students will be placed on probation after two consecutive semesters in which less than a 2.0 semester average is achieved.

All courses, regardless of content, are used to determine classification although only those courses carrying grade points are used in determining averages.

To remove the probation, the student must earn a 2.0 semester average the following semester and continue to maintain the required cumulative average. Students who earn a satisfactory semester average (at least 2.0) and make substantial progress toward achieving the required cumulative average (usually 2.0) in the next semester will be continued on probation. Students who fail to remove probationary status and do not satisfy the requirements to be continued on probation within one semester will be placed on temporary dismissal from the University for one semester. Exceptions to this policy may be granted in extenuating circumstances on appeal from the student to the Academic Standing Committee.

Students placed on temporary dismissal must apply to the Office of the Registrar for readmission at least one month before the start of the semester for which they want to re-enroll. If readmitted, the probationary student has one more semester of enrollment to achieve good standing or to make substantial progress toward achieving good standing allowing an additional semester of enrollment.

A student dropped from enrollment a second time for scholastic deficiency is permanently barred from the University.

Students on probation may enroll for no more than 13 credit hours of courses carrying grade points.

Probation may not be removed by study done at another college. Students barred from Trinity University for scholastic reasons may not transfer credit earned at another college or university during the time they are barred from Trinity, unless they receive special written permission from the Vice President for Academic Affairs to take the work they propose to transfer.

A student dropped from the University for any duration by the Committee on Academic Standing may appeal the decision, but the appeal must be made in writing by the student within ten days of the decision, stating reasons for the appeal and explaining any extenuating circumstances. The appeal should be addressed to the Office of the Vice President for Academic Affairs. Students should request their faculty advisers to submit a recommendation regarding their appeal.

If readmitted, the student will be notified in writing and the conditions of reinstatement will be stated in the notification.

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## Dismissal From a Class and Student Attendance

The University expects regular class attendance by all students. The instructor in each course is expected to state an attendance policy in the course syllabus. Each student is expected to familiarize himself or herself with this policy at the beginning of each course.

Instructors then have the prerogative of informing the Registrar to drop or withdraw a student from a course for nonattendance within the published deadlines for such actions. After the last date to withdraw, a student dismissed from the class roll for excessive absences will receive an F in the course.

Absence from class does not constitute official withdrawal from the class or from the University. A student must initiate withdrawal from the class or from the University in the manner prescribed for “Withdrawal from a Course” or “Withdrawal from the University” in this bulletin.

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## Policy Regarding Disruption of Class

Students will not be permitted to behave in such a manner as to disrupt the orderly conduct of classroom activities. When such behavior occurs, it is the responsibility of the instructor to discuss the matter with the student involved, warning the student that continuation of such behavior may result in dismissal from the class. If the behavior continues, the faculty member may drop the student from the class. Notification of such action shall be communicated in writing to the student, the student’s faculty adviser, the department chair, and the Vice

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President for Academic Affairs. This notification must include a statement of the reasons for the decision and a summary of the appeal procedures. The student has a period of two school days in which to file a written appeal with the Vice President for Academic Affairs. A copy of the dismissal notification will remain in a file created for this purpose in the Office of Academic Affairs; the copy will be destroyed when the student is graduated. If the dismissal from class occurs before the published deadline for withdrawal from a class, the student will receive a grade of "W" in the class; if it occurs after the deadline, the grade will be "F."

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## Final Exam Relief

If a student has three final exams scheduled on the same calendar day, then the student is entitled to have one of the three exams rescheduled. The student must make this request of their instructors at least three weeks prior to the exam date. If such requests do not lead to the necessary accommodation, then the student should work with their academic adviser, who will contact the Office of Academic Affairs. Academic Affairs will prioritize student interests in resolving the issue.

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## Representation of the University by a Student

Any student who represents the University in any public manner as a member of a music or dramatic organization, delegate to any association meeting or convention, or as an officer of any of these organizations must be enrolled as a full-time student, must have a passing grade in at least 9 of these credit hours, and must have earned 9 credit hours during the last semester attended.

Candidates for the athletic squads must be accepted and registered students before they may compete in intercollegiate sports. Eligibility is carefully checked at the time of acceptance and reviewed at the end of each semester in the same manner as all other students, in accordance with NCAA regulations.

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## Internships

### Internships

Trinity University allows students to earn credit for internships that complement their academic program. Faculty involvement is essential to ensure the internship effectively combines work experience with academic learning.

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Therefore, only work experiences that are pre-approved by an academic department will qualify for academic credit or recognition on the academic transcript. The decision to award academic credit will be based on the educational merits of the internship experience as determined by University faculty.

## Description

The internship is to be a structured and supervised professional work experience with an accepted employer in the private, public, or non-profit sector. To be recognized, the experience must be pre-approved by an academic department and must include specific learning objectives. An internship is typically done by a student who has attained sufficient preparation in an academic field. The experience may be paid or unpaid.

## Academic Guidelines

1. Academic departments have the option to formally recognize professional work experiences undertaken by students, but there is no institutional requirement to do so.
2. Departments that recognize internships will designate one or more faculty member(s) to act as the internship instructor(s) prior to the student beginning the experience.
3. Departments that recognize internships will establish criteria and eligibility for student participation in the internship program.
4. Academic credit is regulated as follows:
  - A. The recommended standard for awarding credit is at least 40 hours of work per one hour of academic credit.
  - B. A maximum of 6 credit hours per experience is allowed.
  - C. A maximum of 6 hours of internship credit may be applied to a Trinity degree.
  - D. If no credit is awarded, a department may create, with University Curriculum Council approval, a zero credit internship course to be graded on a pass/fail basis as a mechanism by which to recognize the experience on the academic transcript.
5. Prior to each internship for credit, the student will complete and submit a Learning Agreement to the department chair and/or the supervising instructor. The Learning Agreement will include:
  - The student's personal learning goals for the internship
  - The student's academic responsibilities
  - Phone(s), address, and contact information for both the employer and supervisor
  - The Job Description, including number of work hours to be completed (provided by employer)
  - Student affirmation of good academic standing
  - Acknowledgment of receipt of the departmental internship guidelines
  - Number of credit hours
  - The document will be signed and dated by the student and approved by the internship instructor, the student's advisor and/or department chair (as specified in the departmental internship guidelines).

6. Only courses that are clearly specified as internships in the Courses of Study Bulletin can be used for internship credit (i.e., courses such as Independent Study, Directed Studies, etc., cannot be used).
7. The academic department will provide the student with guidelines that clearly specify the grading criteria for the course. These guidelines will be a component of the Learning Agreement referred to above.
8. Internships will generally be graded on a pass/fail basis. Exceptions require departmental or program chair approval.
9. Credit will generally not be given for internships that are served where either the owner or manager of the host organization or the host supervisor/manager is an immediate relative of the student intern.

## Student Guidelines

1. The responsibility for obtaining an internship lies solely with the student; students are encouraged to utilize faculty, Career Services, and other personal and alumni networking resources.
2. Students must be in good academic standing in order to participate in an internship.
3. No internship for academic credit shall be permitted without a pre-approved Learning Agreement.
4. Students are responsible for officially registering for an internship course through the Office of the Registrar. Credit will not be awarded retroactively.
5. The student will normally register in the internship course for the semester or summer term that encompasses the start date of the work experience. However, if the internship or academic work following the internship carries over into the next semester (or summer term), the course can be registered in that following semester or summer term.
6. The university recognizes that internships will not necessarily conform to university semester and summer schedules; there will be times that students must receive an Incomplete grade ("I") until the experience is completed.
7. Students will comply with all applicable state and federal employment laws; students will also comply with the human resources policies of their work location.

## Internship Instructor Guidelines

1. Approve and sign the Internship Learning Agreement form prior to the start of the internship.
2. Ensure the student is properly enrolled for the internship course.
3. Establish and communicate to the student specific learning goals, academic assignments and expectations prior to the beginning of the internship (i.e., a substantial paper, project, presentation, work journal, etc.).
4. Obtain and review employer feedback on student performance prior to issuing final grade.

## Employment Site Guidelines

1. The employer must provide the name and contact information of a site supervisor/manager who is in

charge of the internship program or the student's supervisor for the duration of the internship. This information is to be submitted on the Learning Agreement form.

2. The employer must submit a job description to the student, which will be a component of the Learning Agreement.
3. The employer will inform the student, prior to the start of work, whether the position is paid or unpaid. If paid, the student will be informed of the rate of pay.
4. When deemed appropriate by the academic department, the employer should, in conjunction with the student and internship instructor, review specific learning goals and assignments to be completed by the student as specified in the Learning Agreement.
5. The employer is encouraged to submit an interim progress report and a final evaluation at the end of the experience to the student's internship instructor. Any significant deficiencies in the student's performance should be reported to the internship instructor.

## Center for Experiential Learning and Career Success

The Center for Experiential Learning and Career Success (CELCS) has numerous resources to support the establishment of internships and to improve efficiency in the management of interns. These services are available to any academic department at its request.

At the department's request, the CELCS will:

1. Assist with job development and employer/recruiter relations.
2. Assist with the development of internship guidelines, appropriate learning objectives, and employer requirements.
3. Provide resources to students for obtaining internships including the use of TigerJobs for intern posting and resume referral.
4. Provide assistance to employers wanting to develop, improve, or meet University criteria for an internship program.
5. Assist employers with the intern recruitment process.

# Course Numbering and Abbreviations

## Course Numbering

Course numbers at Trinity University consist of four digits. The first digit indicates the level of the course: 1 or 2 designates lower division, 3 or 4 designates upper division, 5 or 6 designates graduate level. The second digit indicates the value of the course in semester hours (credit hours). The third and fourth digits identify specific courses within the subject area.

Thus, a course numbered 1320 would be defined as follows:

1 (lower division)	3 (3 credit hours)	20 (specific course)
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Faculty advisers or personnel in the Registrar's Office can assist with explanation of course number meanings.

## Course Abbreviations

African American Studies	AFAM
<b>Art and Art History:</b>	
- Art	ART
- Art History	ARTH
Arts, Letters, and Enterprise	ALE
Biology	BIO
Biomathematics	BIMA
<b>School of Business:</b>	
- Accounting	ACCT
- Business Analytics and Technology- Business	BAT
- Finance	BUSN
- International Business	FNCE
- Management	INTB
- Management Information Systems	MGMT
- Marketing	MIS MKTG
Chemistry	CHEM

<b>Classical Studies:</b>	
- Classics	CLAS
- Greek	GREK
- Latin	LATN
Communication	COMM
Comparative Literature	CMLT
Computer Science	CSCI
Economics	ECON
Education	EDUC
English	ENGL
Engineering Science	ENGR
Entrepreneurship	ENTR
Film Studies	FILM
First-Year Experience	FYE
General Education	GNED
Geosciences	GEOS
<b>Health Care Administration:</b>	
- Health Care Administration	HCAD
- Executive Program	HCAI
History	HIST
<b>Human Communication and Theatre:</b>	
- Human Communication	HCOM
- Theatre	THTR
Humanities	HUMA
International Studies	INTL
Languages across the Curriculum	LAC
Linguistics	LING
Mathematics	MATH
Mathematical Finance	MFIN
Medieval and Renaissance Studies	MDRS

<b>Modern Languages and Literatures:</b>	
- Modern Languages and Literatures	ML&L
- Arabic	ARAB
- Chinese	CHIN
- French	FREN
- German	GERM
- German Studies	GRST
- Italian	ITAL
- Russian	RUSS
- Spanish	SPAN
<b>Music:</b>	
- Music	MUSC
- Music Ensemble	MUSE
Neuroscience	NEUR
Philosophy	PHIL
Physical Education	PHED
Physics	PHYS
Political Science	PLSI
Psychology	PSYC
Religion	RELI
Scientific Computing	SCOM
<b>Sociology and Anthropology:</b>	
- Anthropology	ANTH
- Sociology	SOCI
Special Studies - U.S. and Abroad	SPCL
Sport Management	SPMT
Urban Studies	URBS
Women's and Gender Studies	WAGS

# Degree Requirements

- [Pathways: The Trinity Curriculum](#)
- [Information Literacy at Trinity University](#)
- [Graduation Requirements](#)
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- [Curricular Element I: The First-Year Experience](#)
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## Pathways: The Trinity Curriculum

Trinity University offers undergraduate programs leading to the Bachelor of Arts, Bachelor of Science, and Bachelor of Music degrees. The University is fundamentally committed to ensuring that all Trinity undergraduate degrees represent the broad base of general learning with an underlying commitment to responsible participation in human affairs, which is called a liberal education.

The Trinity Curriculum has six Curricular Requirements that provide the foundation in the liberal arts and sciences for all the bachelor's degrees awarded by Trinity University. Through these requirements, students acquire the necessary skills and disciplinary perspectives to navigate complex questions at Trinity and in their post-graduate lives. The requirements that must be completed in order to receive the bachelor's degree are as follows:

1. The First Year Experience (FYE)
2. Approaches to Creation and Analysis
3. The Core Capacities
4. The Interdisciplinary Cluster
5. The Major
6. Fitness Education

Three optional Curricular Elements can further enrich a Trinity education:

7. Experiential Learning
8. Minors
9. A Second Major

Students are especially encouraged to include Element 7, Experiential Learning, in their curricula.

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## Information Literacy at Trinity University

Information literacy is the ability to gather, critically evaluate, and use information creatively and ethically. During their academic careers, Trinity students will receive systematic guidance and practical experience in order to prepare them for the knowledge economy of the twenty-first century. Students will learn to access information efficiently and to use it critically and competently. A systematic and coherent education in information literacy teaches students to understand the information cycle, be aware of search tools and strategies across disciplines, and to use the major resources in their majors.

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## Graduation Requirements

To receive an undergraduate degree a student must:

- Complete at least 124 credit hours (129 credit hours for a Bachelor of Science in Engineering Science).
- Complete the six Curricular Requirements listed above.
- Complete at least 30 upper-division hours.
- Earn a minimum grade point average of 2.0 in both the major and the entire program of study.
- Satisfy the residency requirement. (See “Residency Requirement,” below.)

To become eligible for a second, and different, bachelor’s degree, a student must earn a minimum of 30 additional credit hours of work in residence beyond the requirements for one degree, at least 18 of which must be upper division. He/she must also complete courses necessary to meet the specified requirements for the second degree and major. In all the additional courses the student must have at least a 2.0 cumulative grade point average. Two undergraduate degrees can be awarded simultaneously to the same person. However, the two degrees must be of different types, such as a B.A. and a B.S.

A student who completes the requirements for two majors without earning the additional credit required for a second degree will receive a single degree with a double major.

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## Residency Requirement

Trinity believes that its students should fulfill at least half of their degree requirements in residence. With this principle in mind, the University establishes the following minimum residency requirements:

- At least 62 credit hours must be earned in residence to complete a baccalaureate degree.
- At least 15 credit hours of each major must be earned in residence, and at least 12 of those hours must be upper division.
- The last 30 credit hours before graduation must be earned in residence.

Exceptions for study abroad: Students with 62 or more credit hours earned at Trinity who wish to enroll in an approved study abroad program in their senior year may be exempted from the last 30 hours-in-residence requirement. Students who transfer to Trinity with 50 or more credit hours may count up to 15 credit hours of approved study abroad credit toward the 62-hour residency requirement. These same exceptions apply to special semester domestic programs approved by the Office of Study Abroad.

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## Student Responsibility

This Bulletin is designed to assist the student and academic adviser in planning and scheduling a degree program. Each student at Trinity University should keep in mind, however, that he or she alone is ultimately responsible for understanding and fulfilling all degree requirements.

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## Guidelines

To encourage students to experience a broad range of educational experiences, the University maintains the following guidelines:

- The eight courses used to fulfill the Approaches to Creation and Analysis and the Interdisciplinary Cluster must come from at least seven different disciplines.\*
- No course may be used to satisfy both the Approaches to Creation and Analysis and the Interdisciplinary Cluster requirement
- No course that has been approved for one Core Capacity may be approved for another.

- The First-Year Experience (FYE) may not be used to satisfy any other graduation requirement.
- A minimum of 24 credit hours must be earned outside the major department and major requirements (n.b., only Engineering Science majors may include the FYE).

\*Each discipline is designated by a particular three- or four-letter subject code, such as "ART" or "ARTH." When a student completes a cross-listed course to fulfill the Approaches to Creation and Analysis or the Interdisciplinary Cluster, it is as if he or she has taken any of the subject code versions of that course, which may exclude future course selections. As an example, URBS 1310 is cross-listed as SOCI 1310, and ANTH 3360 is cross-listed as SOCI 3360, so a student who completed URBS 1310 and ANTH 3360 would be considered as having taken two SOCI courses and could not apply any further course from or cross-listed with SOCI to the Approaches or Cluster requirements.

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## Curricular Element I: The First-Year Experience

Students should demonstrate the ability to analyze sophisticated texts and ideas through (1) reasoned discussion of substantive issues; (2) oral presentations; (3) analytical and argumentative writing; and (4) locating and evaluating diverse information sources to enhance their understanding of course materials.

### Requirements:

All incoming students must complete one First-Year Experience during their first semester at Trinity. A new transfer student with 26 credit hours of transfer credit or whose high school graduation date is a year or more prior to his or her matriculation at Trinity is exempted from the First-Year Experience requirement. The total number of hours required for any Trinity degree shall not be reduced by an exemption from the First-Year Experience.

### Explanation:

The First-Year Experience includes substantial instruction in written and oral communication skills while engaging a topic of widespread or enduring significance. For each topic, the First-Year Experience consists of multiple sections linked by a common syllabus and a weekly common learning experience for all students and faculty. Each section, comprised of approximately 15 students, is taught by two instructors from different departments, and is the equivalent of two three-hour courses for students.

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## Curricular Element II: Approaches to Creation and Analysis

In order to master the skills of analysis, research, and creation, students should demonstrate the ability to use disciplinary approaches characteristic of (1) the humanities, (2) the arts and creative disciplines, (3) the social and behavioral sciences, (4) the natural sciences, and (5) quantitative disciplines.

### Requirements:

To qualify for graduation with a bachelor's degree, a student must successfully complete **one** course (totaling no fewer than 3 credit hours) from each of the following categories at Trinity:

- Courses that enable students to understand the human condition through the study of the arts, literature, history, philosophy, or religion (**humanities**);
  - Courses that enable students to create aesthetic artifacts or performances (**creative expression**);
  - Courses that enable students to engage in the scientific study of human behavior (**social and behavioral sciences**);
  - Courses that enable students to engage in the scientific study of the natural world (**natural sciences**); and
  - Courses that enable students to solve problems within a structured mathematical framework (**quantitative reasoning**).
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## Curricular Element III: The Core Capacities

### A. Written, Oral, and Visual Communication

Students should demonstrate the ability to communicate effectively in a variety of contexts and within a variety of media.

#### Requirements:

To qualify for graduation with a bachelor's degree from Trinity, a student must fulfill the requirements for Written Communication (WC) and Oral and Visual Communication (OVC) in the following ways:

- A student must fulfill the **Written Communication** requirement by successfully completing **two** courses designated with the abbreviation **WC**, including one upper-division course. Only one of these requirements may be satisfied by a creative writing course.
  - A student must fulfill the **Oral and Visual Communication** requirement by successfully completing **two**
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courses designated with the abbreviation **OVC**.

**Explanation:**

Every **WC** course requires extensive writing and provides substantial instruction in written communication.

Every **OVC** course requires significant oral presentation supported by visual products and provides substantial instruction in oral and visual communication.

## B. Digital Literacy

Students should demonstrate the ability to (1) investigate questions, solve problems, or engage in artistic expression through the systematic manipulation of digital information; and (2) evaluate the design, function, or cultural impact of a digital technology.

**Requirements:**

To qualify for graduation with a bachelor's degree from Trinity, a student must fulfill the **Digital Literacy** requirement by successfully completing **one** course designated with the abbreviation **DL**.

**Explanation:**

Courses that carry a **DL** designation provide substantial instruction in principles and tools of digital information manipulation and significant activities where students employ those principles and tools to satisfy the two learning outcomes.

## c. Engaged Citizenship

Students should demonstrate the ability to (1) identify and articulate the perspectives and values of diverse people, groups, and cultures both within the United States and beyond its borders; (2) gather and evaluate information from sources that facilitate cross-cultural understanding; (3) communicate in a foreign language at the intermediate level or above.

**Requirements:**

To qualify for graduation with a bachelor's degree from Trinity, a student must fulfill the requirements for Global Awareness (GA), Understanding Diversity (DV), and Foreign Language (FL), as follows:

- A student fulfills the **Global Awareness** requirement by successfully completing **one** course (totaling no fewer than 3 credit hours) designated with the abbreviation **GA** *or* by successfully completing an approved

study abroad program.

- A student fulfills the **Understanding Diversity** requirement by successfully completing **one** course (totaling no fewer than 3 credit hours) designated with the abbreviation **UD** or by successfully completing an approved independent study project or an internship that substantially engages with the diversity issues listed below.
- A student fulfills the **Foreign Language (FL)** requirement by successfully completing an intermediate level or higher course in a foreign language sequence in a modern or ancient language taught at Trinity, or demonstrating equivalent proficiency by examination.

**Explanation:**

Every **GA** course addresses the history and culture of a region other than the United States.

Every **UD** course addresses diversity issues involving, e.g., race, ethnicity, ability, social class, gender, religion, or sexualities, primarily within the United States.

Every **FL** course focuses on cross-cultural understanding through the mastery and employment of foreign language skills.

## Curricular Element IV: The Interdisciplinary Cluster

Students should demonstrate the ability to explore a complex subject of enduring or contemporary significance by employing multiple disciplinary methods.

**Requirement:**

To qualify for graduation with a bachelor's degree from Trinity, a student must complete at least one **Interdisciplinary Cluster**.

The Interdisciplinary Cluster must be fulfilled by successfully completing **three** courses (totaling no fewer than 9 credit hours) from three disciplines.\* These courses may be structured as a part of a faculty-designed Interdisciplinary Cluster or student-designed three-course learning experience that meets the above guidelines and is approved by the University Curriculum Council. All courses in the Interdisciplinary Cluster must be taken at Trinity University, and only one of these courses may be used to fulfill the requirements of the student's primary major.

**Note:** ID Clusters hold great potential to integrate Trinity's liberal arts and pre-professional programs and to encourage productive collisions among disciplines. Courses used to fulfill the Interdisciplinary Cluster requirement may also be used to fulfill Core Capacity requirements, a minor, or a second major. It is envisioned that most students will complete the Interdisciplinary Cluster by the end of their sophomore year.

## Curricular Element V: The Major

The major provides for in-depth study of a field of specialization. The requirements for each major are found in this bulletin in the departmental listings. Students may elect multiple disciplinary majors or construct a second, interdisciplinary major in consultation with their major advisers.

The candidate for a baccalaureate degree must fulfill the requirements for a major in one of the departments or in one of the interdisciplinary majors listed in the Courses of Study Bulletin. Official admission to a major program occurs in the sophomore year, although the student may begin taking courses in the major department before official admission. A student may apply to major in two departments or programs.

After students achieve sophomore standing and before achieving junior standing (58 credit hours completed), they must apply for admission to the chair of the department in which they wish to major or to the chair of the interdepartmental major. Students may be accepted without conditions or accepted on a provisional basis. Provisional status, if imposed, should be noted on the form. At the end of the provisional period, the chair will notify the student and the Office of the Registrar of the final decision of the department or program. As part of the application process, students are strongly encouraged to complete an online evaluation of the first-year advising program.

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## Curricular Element VI: Fitness Education

Students should possess basic knowledge, understanding, or skills that will help them to make good decisions relating to health throughout life. The premise underlying this objective is that students will be more likely to engage in a healthy lifestyle of exercise and physical activity throughout their lives if they:

- possess the necessary skills to participate in a lifetime sport or activity, or
- understand fitness and its importance, or
- understand exercise and physical activity, and their importance.

This requirement may be satisfied by successfully completing one approved course.

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## Curricular Element VII: Experiential Learning

Trinity University believes that experiential learning is an important part of how students learn to apply knowledge in a real-world environment. It is therefore recommended that all Trinity University students complete at least one

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experiential learning (**EXL**) opportunity.

These opportunities may include:

- Experiential Learning (**EXL**) courses. EXL courses may include, but are not restricted to, those classes where students (1) engage and interact with the local or global community; (2) engage in project-based learning experiences beyond what is traditionally required in a class; or (3) create artifacts for an outside audience.
- Experiential Learning (**EXL**) Fellows Program. Students may participate in existing programs or pursue their own interests through a self-designed experience. These (co-curricular) experiences consist of activities that complement coursework and involve significant reflection. To be recognized as an EXL Fellow, students and their faculty advisors must submit a formal proposal to the Center for Engaged and Experiential Learning envisioned in the Strategic Plan, or other designated approval body.
- Fellowship experiences generally fall into the following categories:
  - Study abroad or cultural immersion;
  - Independent undergraduate research;
  - Creative activity, including original work in the arts;
  - Internships;
  - Field experiences designed to integrate academic study and career exploration; or
  - Civic engagement.

We anticipate that many current departmental senior experiences meet the guidelines for an EXL opportunity, either as recognized courses or as part of the Fellows program. Once the curriculum is fully implemented, Trinity will consider designing an EXL certificate.

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## The Minor

A minor consists of at least 18 credit hours, no fewer than nine of which must be taken at Trinity, and no fewer than nine of which must be upper division. (Exception: for the requirements for a minor in French, German, Russian, or Spanish, see the Modern Languages and Literatures section of this bulletin; for the requirements for a minor in Greek or Latin, see the Classical Studies section.) Consult the appropriate departmental section of this bulletin for specific courses required for each minor. Courses counted toward a minor may not be taken Pass/Fail unless the course is offered exclusively on a Pass/Fail basis. A minor is not required for the completion of any Trinity degree.

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# Graduation With Honors

## Departmental/Major Honors

Students who have maintained their scholastic standing on high levels and who complete a thesis supervised by a faculty member in the department of the major may be candidates for Departmental Honors. Not all departments offer the opportunity for Departmental Honors; consult the course listings of the individual department or program in this Courses of Study Bulletin.

The minimum requirements qualifying a student for Departmental Honors include a 3.33 grade point average, both cumulatively and in the major. Individual departments may require a higher grade point average in departmental courses, but not a higher overall grade-point average.

In addition to the grade-point requirements, a minimum of 6 hours of thesis credit must be acquired during the last three semesters before graduation. This curricular option, entitled Thesis, may also be available to students who are not candidates for Departmental Honors. In all cases the thesis provides students with the opportunity for independent scholarly, scientific, or artistic work. Students may enroll for thesis credit only with the permission of the instructor who will be the adviser. Grounds for faculty decisions may include faculty load, appropriate expertise to guide the particular project, and the willingness of the faculty member to serve as adviser.

In anticipation of completion of the 6 hours of Thesis and the grade-point requirements, the student may become a candidate for Departmental Honors by addressing a written request for consideration to the chair of the department. The request must be received no later than the end of the first full week of the student's final semester at Trinity.

Additional requirements for candidacy vary according to the department but minimally include the oral and written presentation of the thesis to a committee of no fewer than two members of the faculty: the adviser and a reader with appropriate expertise in the area of the thesis. Based on the quality of these presentations, the committee makes the recommendation to award Departmental Honors to the department chair. If the award is made by the department, copies of the thesis are submitted to the Office of Academic Affairs. Students have three options for depositing their theses with the University, and each student should discuss these options with their thesis adviser. The first option is the submission of the thesis in electronic format for deposit in the Trinity Digital Commons. It will be accessible through the Internet to anyone and indexed by search engines like Google. For those who would prefer that their theses not be viewable outside the Trinity campus, there are two other options. (This may be a concern, for instance, if the student intends to submit the thesis for publication to a journal which considers digital archiving to be "previous publication.") One is for the library staff to add the thesis to the Digital Commons but restrict its viewing to campus computers only, thereby treating the thesis as a traditional library print copy. Only the thesis title and abstract will be available to Internet users off-campus. The final option is to submit a traditional print thesis. The costs of binding will be paid by the student. The student can provide the University with two bound copies of the thesis. The award will be indicated by a designation of Departmental Honors on the student's transcript. If the award of honors is denied, the thesis will be considered for non-honors thesis credit.



## University Honors

Students who have maintained their scholastic standing on high levels will graduate with Honors. Students acquiring a grade-point average of 3.875 will receive their degrees summa cum laude; students acquiring a grade point average of 3.750 will receive their degrees magna cum laude; and students acquiring a grade-point average of 3.500 will receive their degrees cum laude. The grade-point average is determined by dividing the total number of grade points earned by the total number of credit hours attempted and the average is not rounded. Honors will be determined on the basis of four years of undergraduate work, 60 credit hours of which must be taken at Trinity University. Students transferring from other institutions will be required to submit all of their grades, but the average grade for the purpose of determining honors shall not exceed the average of their work taken at Trinity University. (Exception: Grades earned in approved Study Abroad programs are not included in the calculation for graduation with Honors.)

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## Phi Beta Kappa

Phi Beta Kappa, the nation's oldest and most prestigious academic honor society, founded in 1776, elects students with broad cultural interests and scholastic achievement. The Epsilon of Texas Chapter at Trinity University, installed in 1974, is one of 280 chapters at distinguished colleges and universities in the United States. Selection of student members, or members-in-course, is generally made in the student's senior year, although a few juniors (usually three or four) are elected each year. The names of those elected are announced prior to graduation in the spring semester. Students do not apply for election to Phi Beta Kappa; the Chapter screens student records.

Criteria for election to Phi Beta Kappa are determined by the Chapter under the guidelines of the national organization. To be eligible for election, the student must satisfy certain minimum criteria:

1. Candidates pursuing a single major in Business Administration or a Bachelor of Music degree are not eligible. Those pursuing a single Bachelor of Arts degree with a major in Music ARE eligible.
2. Candidates must have completed a minimum of 60 hours of primarily liberal arts coursework at Trinity by graduation. Candidates for election as juniors must have completed a minimum of 75 hours of primarily liberal arts coursework at Trinity at the time of the election.
3. Candidates must have completed at least one three-hour course in Mathematics at the level of calculus or higher. Pass/Fail work is not accepted.
4. Candidates must have completed at least one course in a foreign language at the intermediate level or higher. Pass/Fail work is not accepted.

Criteria 3 and 4 are not satisfied by high school experience. Advanced Placement and transfer credit are accepted. Those who are eligible, based on the above minimum standards, are ranked on the basis of grade point average. Those who do not meet the minimum criteria may be nominated for membership by individual members of the chapter.

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Contact the Office of Academic Affairs for further information.

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## Preprofessional Programs

Trinity University offers preprofessional programs in health professions and law. Many of the professions require or recommend the completion of a liberal arts degree before the student begins his or her specialized work. Variations in programs can be arranged to meet individual needs. Students who plan graduate work are urged to make early selection of the graduate or professional school in order to meet the entrance requirements of the chosen institutions. Current catalogs of graduate and professional schools are on file in the reference section of the library.

Trinity University provides individual guidance for students who plan to enter professional schools. Students are invited to contact the chair of the appropriate committee.

## Health Professions Advisory Committee

The Health Professions Advisory Committee (HPAC) develops plans for students to progress through sequences of preparatory work required for postgraduate study in the professions of medicine, dentistry, and certain allied health fields. James Shinkle is the chair of the committee, and Jonathan King serves as associate chair.

The Health Professions Advisory Committee establishes the policies and procedures for students who plan to enter the medically oriented professional schools. Applications to medical, dental, and veterinary schools are routinely made through the HPAC administrative office. Certain other allied health schools also require that applications be made through the HPAC. Students indicating preprofessional interests in medicine or related fields will be assigned to a faculty member familiar with health professions curricula starting with the first advisement.

Though medical schools and medically related professional schools do not require their entering students to have majors in any particular fields, they do have specific entrance requirements and great care is exercised by the committee in advising preprofessional students. For example, Texas state medical schools list the following prerequisites: one year of college English; one-half year of college calculus; two years of biology; one year of general and one year of organic chemistry; and one year of physics.

The science courses (biology, chemistry, physics) must be those designed for science majors and must include laboratory work. A premedical or predental student should plan on taking two of these courses per semester for one or two years of college, often beginning in the first year. All of the prerequisite science courses are usually completed in six semesters. Admissions committees may waive some of these course requirements if competency can be established on the basis of previous work. These decisions are made by individual professional schools on a case-by-case basis, and the preparation of a request for waiver is done in consultation with the student's premedical adviser and the chair of the HPAC.

## Prelaw Advisory Committee

The Prelaw Advisory Committee provides individual guidance and counseling for Trinity students who plan to enter law schools. Students currently enrolled at Trinity who become interested in applying to law schools late in their academic careers can request an appointment with the committee member closest to their major for review of their academic achievements. John Hermann is the chair of the committee.

Law schools do not usually require specific courses as prerequisites to application. Therefore, advisers will recommend courses that they consider useful for success in law school and law-related careers in light of each student's particular academic background.

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## Guidance for Students Interested in Ministry

The University Chaplain, Reverend Stephen Nickle, supports a program of exploration, guidance, and counsel for Trinity students who are interested in careers in ministry. The program is one of vocational clarification tailored to the needs and questions of individual students. It consists of exercises in faith development, participation in initiatives in ministry, reflection on interactions with congregations, and accessing national resources for students intrigued by such professions.

Seminaries and rabbinic schools do not usually require specific courses as prerequisites to application. Therefore, the Chaplain will discuss disciplines that will prepare students for success in ministerial education and careers in light of each student's particular academic background.

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## General Degree Regulations

### Awarding of Degrees

Upon the recommendation of the faculty and the approval of the Board of Trustees, Trinity University confers the degrees of Bachelor of Arts, Bachelor of Science, and Bachelor of Music. (For graduate degrees, see the section on Graduate Studies.) Only those candidates who have fulfilled all scholastic requirements for a degree and who have met their financial obligations to the University will be recommended for the degree.

### Application for Degree

A candidate for an undergraduate degree must file an application for the degree in the Office of the Registrar.

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Dates are specified in the University calendar as deadlines for applying for degrees. Candidates for degrees at winter commencement must apply by the last class day in April; candidates for spring commencement must apply by the first day of classes in December; and candidates for summer graduation must apply by the last day in June.

Candidacy for a degree is not complete until all financial obligations are met. A degree candidate must be registered in the semester or summer term in which the degree will be awarded. If the student is not registered for credit or for study abroad, the student will register for SPCL 4099. There will be a fee of \$200 for registration for SPCL 4099. Registration for SPCL 4099 will be considered as less than one-fourth time for purposes of registration certification.

A degree candidate must be present for commencement exercises unless he/she submits a written request for permission to graduate in absentia to the Registrar at least two weeks prior to commencement.

## Bulletin Requirements

A candidate for an undergraduate degree must meet the requirements as outlined in the Courses of Study Bulletin for the year of his/her first enrollment at Trinity University or any subsequent bulletin under which work is taken. In all cases, however, a candidate must complete work for his/her degree within a period of seven years from the date of the bulletin selected. The degree requirements with which a candidate complies must come from a single bulletin.

## Music Ensembles

Ensembles may be repeated for credit but no more than 8 credit hours (all ensembles combined) may be applied to a degree.

## Interpretation of Degree Requirements

The interpretation of all degree requirements is the responsibility of the Office of Academic Affairs and the Registrar. Problems related to degree requirements should be referred to the Registrar, the faculty adviser, or the department chair. For exceptions to policy in academic matters, students should consult with the Office of Academic Affairs; new students and other students without a declared major may consult the Office of Academic Affairs.

# Enrollment Information

- [Admission Policy](#)
- [Admission Minimum Course Expectations](#)
- [International Student Requirements](#)
- [Temporary Withdrawal](#)
- [Readmission to the University](#)
- [Registration](#)
- [Add/Drop Period](#)
- [Withdrawal from a Course](#)
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- [Health Services, Health Record, and Insurance](#)
- [Credit From Other Institutions and by Examination](#)
- [Credit by Examination](#)
- [Air Force Reserve Officer Training Corps Program](#)
- [Army Reserve Officer Training Corps Program](#)
- [Correspondence Study](#)

## Admission Policy

Trinity University's admission policy, established by the Board of Trustees upon recommendation of the administration, is to attract academically gifted and highly motivated undergraduate men and women students of varied geographic, racial, ethnic, socioeconomic, religious, and national backgrounds who are eager to learn and develop their talents and leadership qualities.

Factors that influence the admission decision include grade point average unweighted on academic solids, course rigor, class rank if reported, high school quality, writing, standardized test scores, recommendations from high school counselors and teachers, special talent and creativity, and contributions to school and community. Students who have attended other institutions of higher learning wishing to transfer to Trinity University will be evaluated also on their academic achievement and courses completed at the prior institution. Final transcripts including any work in progress at the time of admission or done subsequent to admission (such as summer school) must be submitted as soon as available.

Within published requirements for admission, Trinity University does not and will not discriminate in admission of students to study at the University, enrollment in classes, housing, or use of facilities in the academic program because of race, color, religion, sex, age, national origin, disability (if otherwise qualified for admissions), military/veteran status, sexual orientation, or any other status protected by federal, state, or local law.

Students who have never attended Trinity University should contact the Office of Admissions at Trinity University, One Trinity Place, San Antonio TX 78212-7200; (210) 999-7207; 1-800-TRINITY; or <mailto:admissions@trinity.edu>.

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## Admission Minimum Course Expectations

Minimum secondary school course expectations include four years/credits of English; three years/credits of college preparatory mathematics including algebra II and either trigonometry, precalculus, statistics, or other advanced mathematics course approved by the Office of Admissions and the Department of Mathematics; three years/credits of natural science (including two years of laboratory science); three years/credits of social science; and two years/credits of a single foreign language. An average of C- or better is expected in each course.

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## International Student Requirements

Citizens of countries other than the United States, whose first language is not English, are encouraged to submit results from the TOEFL (with a recommended score of 250 CBT, 600 Paper, or 100 iBT). In addition, international applicants must submit International Student Financial Certification demonstrating one's ability to fund a Trinity education (contact International Programs Office for current demonstrated funds requirements). Students should submit certified English translation of documents. Trinity University will issue Form I-20, Certificate for Eligibility for Nonimmigrant (F-1) Student Status, only upon receipt of a non-refundable deposit indicating acceptance of an offer of admission and required financial certification.

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## Temporary Withdrawal

A student may request a temporary withdrawal from the university for one or two semesters. The form applying for temporary withdrawal must be obtained from the Office of the Registrar and filed with the Registrar following consultation with the student's faculty adviser and the Associate Vice President for Student Life and Dean of Students or the Vice President for Academic Affairs. Temporary withdrawal for more than two semesters can be taken only with approval of both the Associate Vice President for Student Life and Dean of Students and the Vice President for Academic Affairs and will be granted only for compelling reason. A student on temporary withdrawal may register for the semester of return at the time of the November or April registration, but the student is responsible for establishing contact with the Office of the Registrar and the faculty adviser in order to achieve such registration.

If the purpose of the temporary withdrawal includes study at another college or university, permission for the temporary withdrawal requires the approval of the Office of the Vice President for Academic Affairs, and the justification must be the student's access to curricula not available at Trinity that is central/critical to the student's

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program of study. Permission to transfer credit is to be sought in the same manner as for summer school at another institution, and the student is not eligible to receive financial aid, including state or federally funded programs, through Trinity University. Reenrollment at Trinity for students on this type of term is dependent on satisfactory performance at the college attended. Behavior that would be deemed grounds for dismissal from Trinity will also be grounds for denial of reenrollment. A temporary withdrawal that includes study elsewhere is not to be confused with approved Study Abroad or approved specialized Special Studies: U.S. semesters for which credit approval and eligibility for financial aid is arranged through the International Programs Office. Note: Students receiving aid from Trinity, particularly students who have borrowed student loans, should consult with the Office of Financial Aid prior to taking a temporary withdrawal to determine what impact a temporary withdrawal may have on aid eligibility.

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## Readmission to the University

Former Trinity students who have not been in attendance for one or more regular semesters must file an application for readmission. Readmission forms may be requested from the Registrar.

Applications for readmission must be submitted to the Office of the Registrar at least two months prior to the beginning of the semester in which the student applying for readmission wishes to enroll. The Committee on Academic Standing reviews applications for readmission from students who are not in good standing. Students readmitted to the University are responsible for making arrangements for housing and financial aid. Contact the Offices of Student Life and Financial Aid for more information.

Students on approved temporary withdrawal from the University or doing approved study abroad or special studies semesters are not required to apply for readmission.

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## Registration

Registration for continuing students will take place during the preceding semester. All continuing students planning to enroll for the upcoming semester must register during this period.

Registration for new students will be held on the opening days indicated on the Academic calendar.

No student who is registered in a course for which all required prerequisites have been met or waived by the instructor or the department chair shall have the registration dropped or changed without the student's prior voluntary consent unless approved by the Registrar or the Office of Academic Affairs. Students may, however, be involuntarily dropped from a course by a faculty member for non-attendance or disruption of class (see

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## Add/Drop Period

Students may add courses to their schedule through the sixth day of classes of a regular semester and through the fifth day of classes of a summer term. Students enrolled in a course that has not officially met before the end of the drop period (e.g., Monday only courses) have until 5:00 p.m. on the day following the first meeting of that course to drop a course. After those dates, which are specified in the Academic calendar, a student may not enter a new course and no further registration for the term will be accepted.

Students may drop courses from their schedule through the sixth day of classes of a regular semester and through the fifth day of classes of a summer term. Students enrolled in a course that has not officially met before the end of the drop period (for instance, Monday-only courses) have until 5:00 p.m. on the day following the first meeting of that course to drop the course. After those dates, which are specified in the Academic calendar, a student may only withdraw from a class with a grade of W.

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## Withdrawal from a Course

The University Registrar establishes a course withdrawal deadline for each semester and summer session. The last day to withdraw from a course shall be during the tenth full week of classes in fall and spring semesters and during the fourth full week of classes in the summer term. If a student withdraws from a course after the Add/Drop period, a grade of W will be entered on the student's transcript.

Withdrawal deadlines for classes offered for a portion of a semester are established as follows. A student may withdraw from such a class with a grade of W until the end of the fourth week of the course during the fall or spring semester, or the second week during the summer semester.

After these dates, withdrawal may be made only with approval from the Office of Academic Affairs. The Associate Vice President for Academic Affairs: Student Academic Issues shall consult with the instructor before approving exceptions to withdrawal policies. After the withdrawal deadline no student may withdraw from a class except in an emergency such as hospitalization.

Withdrawal forms are available in the Office of the Registrar. Students failing to file proper withdrawal forms by the appropriate deadline must complete classes for which they are registered or receive an F.

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# Withdrawal from the University

An honorable dismissal will be granted to any student who may desire to withdraw from the University if he/she is in good academic standing, is not subject to discipline, has made satisfactory arrangements for settling his/her financial account, and has had the requisite exit interviews by the residential life staff and student loan officer (if applicable).

After the established withdrawal deadline, students who withdraw from the University will receive grades of F in all courses for which they are registered except for students withdrawing as a result of an emergency such as hospitalization as certified by the Associate Vice President for Student Life and Dean of Students or Vice President for Academic Affairs.

A student who wishes to withdraw from the University must submit an application for complete withdrawal, signed by his or her adviser, to the Registrar. Official withdrawal from the University for an upcoming semester must be completed by the last day of add/drop in order to receive full refund of tuition. Refund of tuition and other charges will be in accordance with the schedule of reduced costs. (See Student Expenses and Financial Aid.)

Students who stop attending classes without officially withdrawing will forfeit claim to honorable dismissal and will be given failing grades.

Students who have registered for classes but then choose not to attend the University must notify the Office of the Registrar in writing or submit an application for complete withdrawal prior to the start of classes. If written notification is not received by the Office of the Registrar prior to the end of the Add/Drop period, grades of W will be recorded on the official transcript.

Students who withdraw from the University during a term will have their financial aid reviewed and adjusted as applicable in accordance with federal, state, institutional, and external regulations, rules, and policies.

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# Health Services, Health Record, and Insurance

Upon admission to Trinity University, students are required to submit a health record form which includes the student's medical history, documentation of a physical examination, immunization records, and a statement of consent for treatment and confidentiality. The University also requires students to have health insurance.

All students enrolled for nine or more hours of study will be billed for the Student Health Insurance Plan, annually. This ensures that all students are insured, facilitating treatment in the community, when necessary, and minimizes the financial risk associated with serious illness or injury.

Students with personal health insurance may waive the charge by completing an online waiver before the end of Add/Drop. New students will receive the required health record form by mail from Admissions or may obtain it

from the web page [Vital Information for New Students](#), under the “Forms and Digital Copies” tab. The Health Record should be completed by the student and a healthcare provider and returned to Health Services before moving onto campus.

Texas law requires all students under 22 years of age to have received the Meningococcal vaccine at least 10 days before class starts and within the 5 years prior to the first day of class. Students who fail to meet these requirements may not be permitted to register for classes.

The Trinity University Health Services is a health care facility for students in need of medical consultation. The service is staffed by registered nurses, and physicians hold clinics four days a week, by appointment. The range of services includes nursing assessment and care of illness, injuries and minor emergencies; administration of vaccines; laboratory testing; medical evaluation and treatment by a physician during clinic hours; and appropriate medical and dental referrals.

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## Credit From Other Institutions and by Examination

### Transfer Credit

Trinity University evaluates, and may accept, credit earned at other regionally accredited educational institutions. The basis for approval of transfer credit is that the courses are appropriate to the Trinity curriculum. Thus credit may be given to courses whose content is such that they are or could be appropriately offered at Trinity University. Transfer credit will be evaluated and posted to the academic record only for students currently enrolled at Trinity University. Courses with a grade of D+ or lower will not be accepted for transfer credit. Courses completed at another institution at the lower-division level, including all courses completed at a community or junior college, will transfer as lower-division credit even if the closest equivalent Trinity University course is at the upper division.

The University does not recognize the Associate of Arts degree for a set number of hours of credit. Each course is evaluated separately to determine if it can apply toward a Trinity degree.

Transfer credit must be reported on official transcripts sent directly to Trinity University by the other institution. Hand carried transcripts are not accepted as official documents.

Trinity students who plan to take courses at another institution during the summer or during a semester’s absence and wish to transfer credit to apply toward a degree must have signed approval in advance from their faculty adviser, the chair of the department for the course being transferred, and the Registrar. Approval forms are available from the Registrar. In the case of foreign institutions, see the procedure under Study Abroad (below).

Trinity University does not limit the number of credit hours that may be accepted as transfer credit. However, the University does require students to complete courses fulfilling the Approaches to Creation and Analysis and the Interdisciplinary Cluster in residence at Trinity. Exceptions to this rule are made for transfer students, whose

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transfer credit may be applied to the Approaches to Creation and Analysis requirements and will be evaluated on a case-by-case basis.

Students should be aware of the following residency requirements:

- At least 62 credit hours must be earned in residence to complete a baccalaureate degree.
- At least 15 credit hours of each major must be earned in residence, and at least 12 of those hours must be upper division.
- The last 30 credit hours before graduation must be earned in residence.

Exceptions for study abroad: Students with 62 or more semester hours earned at Trinity who wish to enroll in an approved study abroad program in their senior year may be exempted from the last 30 hours-in-residence requirement. Students who transfer to Trinity with 50 or more credit hours may count up to 15 semester hours of approved study abroad credit toward the 62-hour residency requirement. These same exceptions apply to special semester domestic programs approved by the Office of Study Abroad.

## Study Abroad and Off-Campus Study

Trinity University believes that living and studying in another culture can be an essential part of a liberal arts education. Opportunities for such study are available to all Trinity students including those in the natural sciences and professional disciplines. Approximately 40 percent of Trinity students in the most recent graduating classes have spent a semester or academic year abroad.

Most academic majors are directly enriched through foreign study. This is the case for professionally oriented majors such as business, communication, music, theater, and even engineering, as well as for disciplines more traditionally associated with overseas study such as history and languages. Natural science students may take advantage of the opportunity to approach their disciplines through a different, more specialized, educational system in foreign universities (usually in English-speaking countries), although some natural science majors choose instead to focus for a semester on language or cultural studies. A growing number of specialized programs, internship programs, and field studies programs offer additional opportunities.

A wide choice of Trinity approved programs (many taught in English) allow for a semester or year abroad in the United Kingdom, France, Germany, Austria, Spain, Italy, Ireland, Russia, and other European countries, in Mexico, Costa Rica, and South America, in China, Japan, and other Asian countries, in Africa, in Australia and New Zealand, and in Israel and Egypt. Trinity is an affiliate of the distinguished Institute for the International Education of Students (IES), a coordinating institution for Denmark's International Studies Program (DIS), a member of the Intercollegiate Center for Classical Studies (Rome) and of the Council on International Education Exchange (CIEE), and maintains close relationships with a number of other programs and universities. Trinity most directly sponsors programs as a member of Associated Colleges of the South (ACS). Trinity also has direct exchanges with the TEC de Monterrey in Mexico and several schools in East Asia, including Lingnan University in Hong Kong, National Cheng Kung University in Taiwan, and Ewha and Yonsei Universities in Korea.

What particularly distinguishes Trinity's program for study abroad, however, is its determination to place each

individual student in whatever program is most appropriate to the specific needs, interest, and abilities of that individual. To that end Trinity provides a comprehensive set of resources for information and advising. Any interested student should begin by visiting the International Programs Office, preferably as early as possible in his or her academic career. Most forms of financial aid may be applied toward the costs of the semester abroad. Students with financial aid should consult the Study Abroad Office and the Office of Financial Aid.

A Trinity student planning to study abroad and transfer the credits to Trinity must obtain approval for the program in advance. The deadline for processing program applications and approval is October 25, for Spring semester applicants; March 25, for Fall semester, Summer term, and Academic Year applicants. Students intending to study abroad should discuss this interest with their academic advisers as well as with the Study Abroad Counselors. In addition to providing for transfer of credit, approval to study abroad maintains one's status as a currently enrolled Trinity student during the period abroad and provides for residence hall eligibility and arrangements for registration.

Study Abroad policies and procedures apply to a number of special programs that a Trinity student may pursue in the United States. These include the American University Washington Semester and the Semester in Environmental Sciences at Marine Biological Laboratory at Woods Hole in Massachusetts (both of them formal Trinity affiliates), a United Nations semester, urban semesters in Chicago or Philadelphia, an art semester in New York, and semesters at major national research laboratories in several of the physical and biological sciences.

## Dual Credit

Trinity University accepts dual credit (college courses taken as part of the secondary school curriculum) only if the courses taken were not used to satisfy Trinity's expectations for admission as outlined in the Admission Minimum Course Expectations section and have met all other mandated transfer requirements as stated in the Transfer Credit section.

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## Credit by Examination

All credit by examination is recorded on the student's permanent record as credit (CR) without a grade and becomes part of the official transcript. No credit is valid without the student's enrollment for credit at Trinity University. Transfer credit will not be allowed for credit by examination which does not meet Trinity's own requirements.

All credit by examination must be earned in disciplines in which the student does not already have credit more advanced than the level of the examination. Credit by examination may not be duplicated by subsequent enrollment in an equivalent course for credit. Upon recommendation of the student's faculty advisor and with the approval of the appropriate department, the Registrar may delete credit by examination from the permanent record to allow the student to take the equivalent course for credit. Credit earned by examination satisfies degree requirements in the same way as does credit earned by passing the course, except that it does not count as credit

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earned in residence. Trinity does not accept credit earned by examination at another institution.

## College Board Advanced Placement Program

Trinity University allows students to earn credit prior to entrance through the College Board Advanced Placement Program. Trinity awards credit for most AP examination scores of 4 or 5. A current list of AP examinations showing the equivalent credit awarded by Trinity is available from the Registrar. The granting of credit is automatic upon receipt of official score reports.

## Cambridge University International Examinations

Trinity University recognizes some Cambridge University International Examinations, and students may contact the Registrar for further details regarding placement credits in individual academic disciplines.

## International Baccalaureate Program

Trinity University allows students to earn credit prior to entrance through the International Baccalaureate Program sponsored by the International Baccalaureate Organization of Geneva, Switzerland and the International Baccalaureate North American regional office in New York. Trinity awards credit for most IB Higher Level Examination scores of 5, 6, or 7. A current list of IB examinations showing the equivalent credit awarded by Trinity is available from the Registrar. Credit will be granted upon receipt of an official IB transcript.

## Departmental Examinations

Departmental examinations in specific courses are available to qualified students upon approval of the chair of the department in which the examination is to be taken. Approval forms are available from the Registrar. After approval, but prior to taking the examination, the student must pay the nonrefundable departmental examination fee (see Fees for Special Purposes) to the Business Office. The appropriate faculty member then administers and grades the examination. Credit for the course will be granted provided the student passes the examination with a grade of B or higher and completes 24 semester credit in residence. The student must be in good standing when the examination is requested.

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## Air Force Reserve Officer Training Corps Program

### General:

The Air Force Reserve Officer Training Corps (ROTC) program is offered at Trinity University through a Crosstown

Agreement with the University of Texas at San Antonio (UTSA). Trinity students may attend Air Force ROTC classes at UTSA as part of their Trinity curriculum. Students who meet all Air Force ROTC standards will be commissioned as officers in the United States Air Force upon degree completion from Trinity. The Air Force ROTC program is offered regardless of a student's major and does not of itself lead to a degree. A maximum of 16 credit hours may be taken.

The Air Force ROTC program provides management and leadership training to prepare students to serve as officers in the U.S. Air Force. The program is open to any U.S. citizen who meets the academic and physical standards.

The Air Force ROTC curriculum is comprised of four courses each semester conducted at the first year, sophomore, junior, and senior levels. Speaking and writing skills are progressively developed in all four levels of instruction.

"The Foundation of the United States Air Force" is the one-hour first-year-level course. It introduces students to the United States Air Force and provides an overview of the basic characteristics, missions, and organization of the Air Force as well as introduction to communication skills. A mandatory Leadership Laboratory must be taken in conjunction with the course. "The Evolution of USAF Air and Space Power" is the one-hour sophomore-level course. It features topics on Air Force heritage and leaders; introduction to air and space power through examination of competencies and functions; and continued application of communication skills. A mandatory Leadership Laboratory must be taken in conjunction with the course. "Air Force Leadership Studies" is the three-hour junior-level course. Students learn advanced skills and knowledge in management and leadership. Special emphasis is placed on enhancing leadership skills. A mandatory Leadership Laboratory must be taken in conjunction with the course. "National Security Affairs/Preparation for Active Duty" is the three-hour senior-level course. It provides students with the foundation to understand their role as military officers in American society. It is an overview of the complex social and political issues facing the military profession. As with the previous courses, a mandatory Leadership Laboratory must be taken in conjunction with the course. The Leadership Laboratory is approximately one hour and forty-five minutes; all cadets attend the laboratory, which is held once a week during the semester.

## Four-Year Program:

The General Military Course (GMC) is open to all Trinity students, and is generally taken during the first and second years. There is no obligation incurred by nonscholarship GMC cadets. Cadets will learn the history, role and structure of the U.S. Air Force, and basic military skills. Veterans who have been honorably discharged may be granted credit for part or all of the GMC.

The Professional Officer Course (POC) is the upper division portion of the Air Force ROTC program. Admittance to the POC is based on competitive criteria and the needs of the Air Force. Prior to entering the POC, applicants will normally attend a four-week field training encampment. The POC is normally taken during the junior and senior years. All POC students are enlisted in the Air Force Reserve and receive a subsistence allowance. Upon completion of the POC and all degree requirements, cadets are commissioned in the U.S. Air Force and serve a minimum of four years on active duty. A maximum of 12 hours is allowed for the POC.

## FLIGHT TRAINING:

The AFROTC has a very competitive program for qualified people who desire to become a pilot or navigator. There

are particular physical qualifications, which include vision, height/weight, Air Force Officer Qualifying Test scores, and health history. AFROTC pilot candidates attend Introductory Flight Training, which pays for a private pilot's license if the member does not have one already.

#### SCHOLARSHIPS AND REMUNERATION:

Air Force ROTC offers 4-, 3.5-, 3-, 2.5-, and 2-year competitive scholarships. Four-Year Program cadets may compete for all scholarships, while Two-Year Program applicants can apply for 2-year scholarships. All scholarships provide tuition and fee assistance, a book allotment, plus \$250-\$400 a month subsistence allowance. These scholarships are awarded solely on academic merit. Students interested in applying for a scholarship should contact the Professor of Aerospace Studies at UTSA.

All students enrolled in the POC and contracted to the U.S. Air Force will be paid a \$350-\$400 a month subsistence allowance.

#### UNIFORMS AND EQUIPMENT:

All uniforms, textbooks, and other equipment will be issued to students enrolled in Air Force ROTC courses. Students are responsible for the maintenance and upkeep of all items issued them.

Air Force ROTC Offices (210-458-4624) are located in the North Paseo Building (1.220) on the University of Texas at San Antonio campus.

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## Army Reserve Officer Training Corps Program

The Army Reserve Officer Training Corps (ROTC) program is offered at Trinity University through a crosstown agreement with St. Mary's University. Trinity students may attend Army ROTC classes at St. Mary's as part of their Trinity curriculum. Students who meet all Army ROTC standards will be commissioned as officers in the United States Army upon degree completion from Trinity. The Army ROTC program is offered regardless of a student's major and does not of itself lead to a degree. A maximum of 18 credit hours may be taken.

In addition to the courses described below, a Leadership Laboratory is held every Wednesday afternoon for two hours to further the development of leadership skills through a varied program consisting of field trips, practical exercises, and visits to military installations.

The Professor of Military Science at St. Mary's University and the Army ROTC offices are located at the bottom floor of Treadaway Hall at St. Mary's. The telephone numbers are 210-436-3415 (ROTC Recruiting Operations Officer) and 210-379-1997 (ROTC Enrollment Officer). The e-mail address is <mailto:rotc@stmarytx.edu>.

## Four-Year Program:

The Basic Course, usually pursued concurrently with the freshman and sophomore years, is voluntary for students who are physically qualified for military training. There is no obligation incurred by nonscholarship cadets. Veterans who have served on active duty for a period of over one year and who have received an honorable discharge, or High School students who have completed 3 or 4 years of JROTC, may be granted credit for the basic course with concurrence of the Professor of Military Science.

The Advanced Course may be pursued by students who are physically qualified and have met the standards prescribed by the Professor of Military Science in scholastic achievement and demonstrated leadership. Cadets are normally enrolled in the Advanced Course during their Junior and Senior Year or Graduate students pursuing a Master's Degree. They are required to attend a five-week ROTC Leadership Development Assessment Course (LDAC) the summer following their junior year. Upon satisfactory completion of LDAC and the academic work required for a degree, students are commissioned as Second Lieutenants in the United States Regular Army, the Army Reserves, or the Army National Guard.

The Basic Course consists of MS courses at the 1000 and 2000 level. The Advanced Course consists of MS courses at the 3000, 4000, or 5000 level.

## Two-Year Program:

In addition to the standard four-year course outlined above, the St. Mary's University Military Science Department offers a two-year program for those who did not have or take the opportunity to complete the normal Basic Course. In order to enroll in the Advanced Course, a student must successfully complete four weeks of leadership training, provided at the Leadership Training Course (LTC) during the summer months prior to beginning their junior year or their first year in graduate school. If students desire to take advantage of this opportunity, they should communicate directly with the Professor of Military Science not later than March 1 of the year preceding the last two years at Trinity University.

## Scholarship and Remuneration:

The Department of the Army offers 4-, 3-, and 2-year competitive scholarship assistance to qualifying ROTC students. This assistance consists of payment of 100% of tuition and fees and a \$1,200 a year book allotment, plus a grant to the ROTC cadet of \$300 to \$500 a month during the period of enrollment (not to exceed 40 months). The student need not be enrolled in the ROTC program prior to competing for a scholarship. Students interested in competing for scholarship assistance under this program should contact the Army ROTC Enrollment Officer.

Formally enrolled Advanced Course students who are not under the scholarship program will be given a grant at the rate announced annually by the Secretary of the Army (currently this rate is \$450 to \$500 per month) not to exceed 20 months. During LDAC, all students are paid at the rate of one-half of the base pay per month of a second lieutenant in lieu of subsistence allowance.



## Uniforms and Equipment:

All uniforms, textbooks, and other equipment will be issued to students enrolled in Army ROTC courses. Students are responsible for the maintenance and upkeep of all items issued to them.

## Courses:

Students may register for the following courses through St. Mary's University and other participating colleges and universities.

### MS 1101 FUNDAMENTALS OF LEADERSHIP AND MANAGEMENT 1 SEM. HOUR

Organization of the Army and ROTC; career opportunities for ROTC graduates, and the military as a profession. Customs and traditions of the service. Development of leadership potential, First Aid, and Introduction to Map Reading.

### MS 1102 FUNDAMENTALS OF LEADERSHIP AND MANAGEMENT 1 SEM. HOUR

Leadership studies of problems facing junior leaders in today's Army in non-combat situations. Effects of technological and sociological change on the military. Continuation of customs and traditions of the service. Development of leadership potential. Basic military skills training.

### MS 2201 SELF/TEAM DEVELOPMENT 2 SEM. HOURS

Learn/apply ethics-based leadership skills that develop individual abilities and contribute to the building of effective teams of people. Develop skills in oral presentations, writing concisely, planning events, coordination of group efforts, advanced first aid, land navigation, and basic military tactics.

### MS 2202 APPLIED LEADERSHIP AND MANAGEMENT 2 SEM. HOURS

Military use of maps and terrain analysis with emphasis on practical experiences. Introduction to the leadership techniques required to conduct patrolling, offensive and defensive tactical missions.

### MS 3301 ADVANCED LEADERSHIP AND MANAGEMENT 3 SEM. HOURS

Performance oriented instruction in preparation for Advanced Camp. Analysis of psychological, physiological, and sociological factors which affect human behavior. Analysis of leadership and management processes. Techniques in planning, presenting, and evaluating performance-oriented instruction.

Prerequisites: MS 1101, 1102, 2201, and 2202, or permission of the Professor of Military Science.

### MS 3302 ADVANCED LEADERSHIP AND MANAGEMENT 3 SEM. HOURS

Performance-oriented instruction in preparation for Advanced Camp. Development of the student's ability to express him/herself clearly and accurately, with emphasis on the analysis of military problems, and the

preparation and delivery of logical solutions. Analysis of the leader's role in planning, directing, and coordinating the efforts of individuals and small units in the execution of offensive and defensive tactical missions.

Prerequisites: MS 3301 or permission of the Professor of Military Science.

#### MS 4301 SEMINAR IN LEADERSHIP AND MANAGEMENT 3 SEM. HOURS

Analysis of selected leadership and management problems. Responsibilities of the Commander and staff in the areas of administration, personnel, operations and logistics. Introduction to military justice and the Army training system.

Prerequisites: MS 3302 or permission of the Professor of Military Science.

#### MS 4302 SEMINAR IN LEADERSHIP AND MANAGEMENT 3 SEM. HOURS

Analysis of selected leadership and management problems with a concentration on management problem analysis and decision making, planning and organizing, delegation and control, and interpersonal skills required for effective management. Seminars in the role of the officer in the conduct of personal affairs and ethics.

Prerequisite: MS 4301 or permission of the Professor of Military Science.

#### MS 5301, 5302 ADVANCED SEMINAR IN MILITARY ISSUES I, II 6 SEM. HOURS

Analysis of various topics concerning the principles of war and the contemporary operating environment. Analysis and discussion of various topics pertaining to the duties and responsibilities of a 2nd Lieutenant. Additional course options are special projects and Ranger Challenge participation based on guidance and approval of the Professor of Military Science.

Prerequisite: MS 4301 or 4302 or permission of the Professor of Military Science.

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## Correspondence Study

Trinity University does not offer undergraduate academic work by correspondence and does not accept such work.

## General Information

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- [Independent Status, Charter, Covenant](#)
- [Accreditation](#)
- [Non-Discrimination and Diversity Policy](#)
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## Mission

Trinity University is a transformational liberal arts and sciences university with selected professional and pre-professional programs. In pursuit of this mission, Trinity is committed to the highest levels of academic and professional excellence in teaching, research, learning, service, leadership, and personal integrity. Trinity embraces innovation in all pursuits: rigorous and relevant courses, supportive mentoring relationships, and a wealth of learning opportunities wherever they occur. Trinity prepares its graduates to pursue lives of meaning and purpose.

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## Independent Status, Charter, Covenant

Trinity University is an independent university founded in 1869 by Presbyterians, an institution that served a full century as “the college of The Synod of Texas.” In 1969 a covenant was adopted between the Synod and the University, and the previous legal ties were dissolved. Trinity’s covenant with The Synod of Texas was reaffirmed in 1973 by the newly organized Synod of the Sun. The covenant is one of mutual trust and obligation in which the Board of Trustees commits itself to continue to pursue the purposes for which Trinity University was founded. The church pledges itself to continue its interest in and support of the University. The covenant was reaffirmed with the Presbyterian Church (U.S.A.) in 1983, 1989, and again in 2000.

The amended charter creates a self-perpetuating Board of Trustees consisting of thirty-six persons who have complete control and management of the institution. The legal purpose of the corporation is to maintain and operate a coeducational institution and to confer degrees upon graduating students and other deserving persons.

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# Accreditation

Trinity University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award bachelors and masters degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, or call 404-679-4500 for questions about the accreditation of Trinity University. The Commission requests that they be contacted only if there is evidence that appears to support an institution's significant non-compliance with a requirement or standard. Normal inquiries about Trinity University, including inquiries regarding admissions requirements, financial aid, and educational programs, should be addressed directly to Trinity University and not to the Commission's office. For more information about the Commission, please visit their web site at <http://www.sacscoc.org/>.

Texas state teachers' certificates are issued to those students who fulfill the requirements of the Texas Education Agency. The University is a member of The American Association of Colleges for Teacher Education and is accredited by the National Council for Accreditation of Teacher Education for the preparation of elementary teachers, secondary teachers, and school service personnel, with the master's degree.

A chapter of Phi Beta Kappa is active on the Trinity campus. In addition, Trinity University is approved and accredited by the Texas Education Agency and the United States Office of Education. The Department of Chemistry is approved by the American Chemical Society. The Bachelor of Science degree in Chemistry and the Bachelor of Science degree in Biochemistry are certified by the American Chemical Society.

Trinity's undergraduate Engineering Science Program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET). EAC/ABET is the only national agency that accredits engineering programs.

The Department of Business Administration is accredited by the Association to Advance Collegiate Schools of Business International (AACSB International).

The Department of Health Care Administration is accredited by the Commission on Accreditation Healthcare Management Education (CAHME) for its health care administration program.

The University is a corporate member of the American Association of University Women, and its women graduates are eligible for membership in this organization.

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## Non-Discrimination and Diversity Policy

Within published requirements for admission, Trinity University does not and will not discriminate in admission of students to study at the University, enrollment in classes, housing, or use of facilities in the academic program because of race, color, religion, sex, age, national origin, disability (if otherwise qualified for admission), military/veteran status, sexual orientation, gender identity, gender expression, or any status protected by federal,

state, or local laws.

Trinity University does not and will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin, disability (if otherwise qualified for the job), military/veteran status, sexual orientation, or any other status protected by federal, state, or local laws. The University is committed to making employment-related decisions according to an applicant or employee's experience, talent, and qualifications, without regard to his/her race, color, religion, sex, age, national origin, disability (if otherwise qualified for the job), military/veteran status, sexual orientation, gender identity, gender expression, or any status protected by federal, state, or local laws.

The Compliance Officer of the University is the Director of Human Resources. Any questions or complaints relative to discrimination should be referred to the Office of Human Resources. The Section 504/Americans with Disabilities Act Compliance Officer is the Associate Vice President for Finance and Administration. Students with disabilities who desire accommodations should contact Student Accessibility Services, preferably before the beginning of each semester. Any questions or complaints relative to facilities, services, and accessibility should be referred to the Office of Finance and Administration.

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## Security Policy Statement

Trinity University's campus security program is an ongoing process that includes the development and enforcement of regulations, procedures, and practices to provide a reasonable level of security for property, information, and for the personal safety of employees, students, and visitors.

Administrative and supervisory personnel are responsible for the incorporation of security principles and procedures in their respective areas of operations.

Each member of the faculty, staff, and student body is responsible for carrying out campus regulations, procedures, and practices and shall comply with federal, state, and local laws related to security matters while on the campus or in the course of representing or conducting University activities.

In compliance with the Crime Awareness and Security Act of 1990, the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, additional information regarding security policies and crime statistics is available from the Office of the Director of Campus Security, Trinity University, (210) 999-7070. This information is also available at the internet website:

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# Electronic Communication

Trinity University supplies every student and employee with an e-mail address. Students, faculty, and all employees of the university are expected to monitor their e-mail on a regular basis. E-mail is an official means of communication and will be utilized to conduct business and to supply information to students, staff, and faculty. E-mail is also a critical and primary communication

# Graduate Studies

Trinity University offers four graduate degrees: the Master of Arts (Education: School Psychology); the Master of Arts in Teaching; the Master of Education (Education: School Leadership); and the Master of Science (Accounting and Health Care Administration). Graduate work was instituted at Trinity University in 1950. The objective of the Graduate Program is to provide students with opportunities to engage in study at an advanced level and to develop professional competence in the area of their specialization, with emphasis upon the development of analytical thinking, independent and original research, and effective communication.

- [Commission on Graduate Studies](#)
- [Graduate Faculty](#)
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## Commission on Graduate Studies

The Commission on Graduate Studies serves as the academic policy committee for graduate students on all matters related to graduate degrees and programs. The Commission consists of representatives from each graduate program, two students appointed by the Graduate Student Association, the Registrar, and the Vice President for Academic Affairs or his or her representative.

# Graduate Faculty

As a liberal arts university with selected professional degree programs, Trinity does not maintain a separate graduate faculty. Faculty members selected to teach graduate-level courses will have an earned doctorate (or other terminal degree) in their teaching field and demonstrated research capability, or will be practitioners with at least a master's degree and appropriate training and experience in the professional field they are teaching. The Department Chair is responsible for determining whether a faculty member's qualifications meet the requirements for graduate-level teaching. Eligibility to teach at the graduate level is periodically reviewed in order to maintain viable programs and specialized and regional accreditation.

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## Admission

### Required Documentation

Persons interested in doing graduate work at Trinity University should submit the following items:

1. Application form and fee.
2. An official transcript or transcripts of all previous college and university work. These transcripts must be not more than one year old. All transcripts become a part of the University's files and will not be returned.
3. Test scores not over five years old on the Graduate Record Examination, Graduate Management Admission Test, or other examinations required by the graduate program.
4. One or more letters of recommendation if specified by the graduate program.

The application deadline is one month prior to the beginning of the semester or as established by the program. Persons outside the United States should submit their applications at least three months prior to the semester they plan to enter the University. Registration is not permitted until application for admission has been approved.

Citizens of countries other than the United States, whose first language is not English, are encouraged to submit results from the TOEFL (with a recommended score of 250 CBT, 600 Paper, or 100 iBT). In addition, international applicants who are not permanent residents of the United States must submit the Statement of Financial Support, or signed, certified bank documents demonstrating one's ability to fund a Trinity education. (Contact the International Programs Office for current financial certification requirements.) Applicants should submit certified English translations of documents. (See Foreign Studies Evaluation, below.) Trinity University will issue Form I-20, Certificate for Eligibility for Nonimmigrant (F-1) Student Status, only upon receipt of a nonrefundable deposit indicating acceptance of an offer of admission.



## Bachelor's Degree Requirement

Graduates holding the bachelor's degree from an institution accredited by the appropriate regional accrediting organization and fulfilling all other requirements listed in this bulletin may be considered for regular admission to graduate study. Graduates of colleges that are not accredited by the appropriate regional accrediting organization may be considered for provision admission. (For students who hold degrees from institutions outside the United States, see Foreign Studies Evaluation, below.)

## Prerequisite Course Requirements

The requirement for background work varies with each graduate program at Trinity. The department chair or program director may recommend that prerequisites be waived for superior students or, in certain cases, that prerequisites be taken on the graduate level. Consult individual department listings for specific requirements.

## Requirements for Regular Admission

To be considered for regular admission, an applicant must submit all required documentation and present evidence of the following:

1. A grade point average of 3.00 or better on the last 60 hours of undergraduate level work or a grade point average of 3.00 or better on all courses taken in the undergraduate major or any relevant concentration. (Students who have earned at least 18 hours of graduate level credit must have a GPA of 3.00 or better on all graduate course work attempted. Graduate course work may be considered in lieu of undergraduate course work.)
2. Acceptable scores on the Graduate Record Examination or Graduate Management Admission Test, as articulated by the individual program or department.

In evaluating an application for graduate study, the department chair or program director will consider the applicant's commitment to and suitability for the relevant profession. Applicants who meet the requirements for regular admission may nonetheless be denied admission if significant academic, ethical, or dispositional concerns are identified as part of the admission process.

## Requirements for Provisional Admission

Applicants who fail to meet the requirements for regular admission may be considered for provisional admission. Students admitted provisionally are considered to be fully admitted to their respective graduate programs.

The final decision on provisional admission is made by the Office of Academic Affairs after receiving the recommendation of the department chair or program director.

Students admitted provisionally shall be reviewed after completion of their first 6 hours of graduate study. Those with a grade point average below 3.00 shall be dismissed from the graduate program.

## Non-Degree Admission

Upon the approval of the appropriate academic department, students not pursuing a degree may be admitted on a non-degree basis to enroll in graduate courses.

Students who have been admitted to a program on a non-degree basis and who later decide that they would like to become degree candidates must apply for admission to degree status and provide all required information including test results. There is no guarantee that courses taken on a non-degree basis will later apply for credit toward a graduate degree.

## Foreign Studies Evaluation

All foreign academic credentials submitted for transfer credit or for admission to the graduate program must be accompanied by a professional evaluation performed by an approved evaluation service, including an English translation if not in English. Course descriptions or syllabi may also be required. It is the student's responsibility to procure the evaluation and to assume financial responsibility for it. Because of the importance of this information, Trinity only accepts evaluations certified as official and received directly from the American Association of Collegiate Registrars and Admissions Officers (AACRAO) or from other approved service providers. Contact the Office of the Registrar or visit the web site for a list of approved foreign credentials evaluation services.

Evaluations should include an explanation that the institution is recognized by the ministry of education in the home country and is generally considered to offer at least the equivalent of U.S. higher education credit. In addition, the evaluation must include an explanation of the credits, the grading system and course levels, and a course-by-course evaluation. Trinity is under no obligation to award credit on the basis of an outside agency's evaluation. The professional evaluation will be used as a tool in the overall credit evaluation process.

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## Advising and Registration

After admission has been approved, degree students should confer with the graduate program director of the major department or with an adviser appointed by the program director to arrange a complete program of graduate studies. Students admitted to graduate study will follow the regular university procedures for registration.

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## Readmission

A former graduate student who chooses to seek readmission after being dismissed from the University for any reason, or who chooses to seek readmission after withdrawing from the University for any length of time, must

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submit an application for readmission no later than one month prior to the beginning of the term. Official transcripts from any colleges or universities attended during the time since the student last attended Trinity University must be submitted as part of the application for readmission. No new application fee is required.

The decision to readmit or not to readmit a student shall be made by the academic department or program at its discretion. In making this decision, the department may consider, among other things, the student's performance within the program and his or her commitment to and suitability for the relevant profession. The department may require the student to submit updated application materials, including updated test scores and letters of recommendation.

If a department denies an application for readmission, the student may appeal to the Commission on Graduate Studies. The Commission may choose to gather evidence and to interview any parties whom the Commission deems relevant. The Commission may decide to uphold or to overturn the department's decision, and the Commission's decision shall be final.

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## Minimum Hour and GPA Requirement

A minimum of thirty semester hours is required for the master's degree.

A minimum grade point average of 3.00 is required for the master's degree. No more than 6 hours of courses graded C can apply toward a master's degree.

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## Applicable Bulletin

Students have the option of completing degree requirements as specified in the Trinity University Courses of Study Bulletin in effect at the time of matriculation provided all requirements are completed within six years (see Time Limit) or following requirements of any later bulletin that satisfies the six-year time limit.

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## Additional Requirements

Some graduate programs may require one or more of the following:

- Thesis;
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- Applied research project;
  - Portfolio;
  - Internship or residency;
  - Licensing examination.
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## Graduation Requirements

Each student must secure from the Office of the Registrar an application for graduation. The student is responsible for returning the graduation application on or before the date listed in the calendar.

A degree candidate must be present for commencement exercises unless he or she has notified the Registrar of his or her intention to graduate in absentia.

A degree candidate must be registered in the semester or summer term in which the degree will be awarded. If the student is not registered for credit or thesis extension, the student will register for SPCL 6099. There will be a fee of \$200 for registration for SPCL 6099.

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## Academic Load

A graduate student taking at least 9 semester hours of graduate work per semester is considered a full-time student. The maximum load during the summer session is 9 semester hours. A graduate student registered for thesis credit, required internship, or residency is also considered a full-time student without regard to the number of credit hours. The first semester of thesis extension will be considered full-time enrollment, but subsequent semesters of thesis extension will be considered as less than one-quarter time.

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## Transfer of Graduate Credit

Ordinarily, all work for the master's degree must be done at Trinity University. Under some circumstances acceptance of graduate credit for work done in other regionally accredited institutions may be approved by the chair of the department concerned. No course completed with a grade lower than a B will be approved. Up to 10 semester hours but no more than twenty percent of the total degree requirement can be transferred to apply toward a graduate degree. No hours earned toward a completed or previously awarded graduate/professional degree may be transferred. However, students with a previously awarded graduate/professional degree may have up to 10 semester hours but no more than twenty percent of the total degree requirement waived by the chair of

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the department. Students granted such a waiver may not transfer any credit to apply toward a graduate degree, except on petition to the Commission on Graduate Studies. Furthermore, the GPA of transferred credit will not be applied to meet the GPA requirement for a graduate degree at Trinity. No transfer credit will be accepted or waiver approved until the student has earned 12 semester hours of graduate credit at Trinity University. The six-year limit applies to transfer work as well as to courses taken in residence.

Courses offered by accredited universities at extension centers or other off-campus locations, or in online formats, will be evaluated individually by the Department Chair. Such courses will be accepted only when course requirements and quality standards comparable to regular on-campus offerings can be demonstrated. Credit for work done by correspondence will not be accepted for the graduate degree.

In some graduate programs, students may obtain academic credit for from 3 to 12 hours of graduate work on the basis of previous academic preparation and/or successful experiences. In order to obtain this credit, the student must demonstrate the attainment of objectives identified for the particular course or courses in the program. Candidates may demonstrate the attainment of these objectives by satisfactorily completing a written and/or oral examination administered by the department. The academic credit will be placed on the student's permanent record.

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## Independent Study

No more than 6 semester hours of credit in independent study/problems courses may be applied to the student's degree program.

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## Grades and Minimum Performance Requirements

The grading system for all graduate courses is as follows:

A	Excellent, Superior Performance
B	Good, Solid Performance
C	Fair, Marginal Performance
F	Failure, not meeting course requirements
I	Incomplete
PR	In Progress, for thesis or special study/research courses

PP	Pass in a pass/fail course
FF	Failure in a pass/fail course
NC	Non-credit
Pass/Fail	Departments desiring to offer selected courses only on a Pass/Fail basis may do so with prior approval of the Office of Academic Affairs.
W	Withdrawn – Graduate students may withdraw from a graduate course with a grade of W any time up to the time that mid-semester grades are due for that semester or during the first two weeks of summer session. Such withdrawal must be filed at the Office of the Registrar. Nonattendance does not constitute withdrawal from a class. Students may withdraw with a grade of W up to final examination week. However, such withdrawal must be approved by the Department Chair or Graduate Program Director in consultation with the instructor.

Unless the instructor specifies an earlier completion date, grades of “Incomplete” will be changed automatically to “F” in the Registrar’s Office after one year. Under unusual circumstances, an extension of time may be granted by the Office of Academic Affairs upon request of the instructor.

No credit course may be changed to “non-credit” after the last day of registration.

## Probation and Dismissal:

### Probation:

A graduate student will be placed on academic probation following any term in which the student fails to achieve a grade point average of at least 3.00 or receives a grade of “F” in any course, regardless of the level of courses taken and the cumulative grade point average. A student on probation may not hold a graduate assistantship. Academic probation is removed when the student completes a subsequent term and achieves a term grade point average of at least 3.00 with no grade of “F” in any course and a cumulative grade point average of 3.00 in all graduate level courses completed at Trinity University.

### Dismissal:

1. A graduate student will be dismissed from the graduate program following any term in which the student earns a grade point average of less than 2.00, regardless of the level of courses taken and the cumulative grade point average.
2. A graduate student placed on academic probation will be dismissed from the graduate program if the student fails to meet the requirements to be removed from probation after attempting nine semester hours.
3. Students dismissed from the graduate program have the option to appeal to the faculty members of the Commission on Graduate Studies. The appeal must be made in writing by the student within 10 days of

notification of the decision. When making a decision on an appeal, the Commission will consider the recommendation of the student's academic department.

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## Grade Appeals

Trinity University recognizes that students are responsible for maintaining standards of academic performance established for each course in which they are enrolled. However, the University also recognizes that students should have protection through orderly procedures against prejudicial or capricious academic evaluation. In all cases, the burden of proof rests on the student initiating the appeal.

The procedures for student appeal of semester grades contain the presumption that student grades are the responsibility of the course instructor. As a matter of academic principle, the process of appeal remains in the hands of the teaching faculty. Except for the actions specified in Section 5 below, members of the Administration shall not influence the outcome of the grade appeal process.

All parties in a grade appeal shall make every reasonable effort to complete the appeals process in a timely manner. If any party is absent from campus (for example, if a faculty member is on academic leave or if a student is studying abroad), the appeals process may be deferred until all relevant parties have returned to Trinity. In this case, however, the appellant must still meet the stated deadline by submitting written notification of his or her intention to appeal.

An instructor who has pieces of student work in his or her possession shall retain those pieces of student work until they can no longer be relevant to a grade appeal.

1. To initiate the appeal of a semester grade, a student must submit a written appeal to the instructor no later than ten (10) business days after the beginning of the following semester. The instructor shall notify the student of the outcome of his or her review of the grade no later than five (5) business days following receipt of the written appeal.
2. If the student wishes to contest the instructor's decision in step one, he or she may request a mediated discussion involving the student, the instructor, and the Department Chair. To initiate this step in the appeals process, the student must submit a written appeal to the instructor's Department Chair no later than ten (10) business days following receipt of the instructor's decision. The instructor shall receive a copy of this statement.

The Chair will attempt to mediate a discussion between the student and the instructor to clarify the matter and suggest possible resolutions. If the Chair happens also to be the instructor involved, then the student may request that the Associate Vice President for Academic Affairs: Curriculum and Faculty Development ask another faculty member of the department to receive the student's appeal.

3. If the student wishes to contest the outcome of the mediated discussion in step two, he or she may

request a departmental review. To initiate this step in the appeals process, the student must submit a written appeal to the instructor's Department Chair no later than ten (10) business days after receiving the outcome of the mediated discussion.

The Chair (or the Chair's substitute) will appoint two tenured members of the department to serve as a review committee, and will notify the student and the instructor of this action. In the case of a General Education course or cross-listed course, the instructor's department will serve as the site for the appeals process. If the student is a major or minor in the department, the student may ask his or her adviser to be an additional member of the committee. If a small department cannot provide two eligible faculty members to serve on the committee, then the Chair (or the Chair's substitute) will ask a faculty member from a department similar in curriculum and academic evaluation to serve on this committee. Departmental review committees may be convened only during an academic semester.

The departmental review committee will receive written statements from both the student and the instructor, as well as copies of any graded work involved. In addition, both the student and the instructor (and the student's academic adviser, if requested) may be present for the duration of the hearing (prior to voting), during which both parties may offer clarifying statements. The Department Chair will also be present at the meeting, but will not be involved in the determination of the appeal. If, after considering these statements, the committee decides that the grade was not based on prejudicial or capricious evaluation, the Chair (or the Chair's substitute) will give written notification of this decision to the student and the instructor.

However, if the departmental committee determines that the grade was indeed based on prejudicial or capricious evaluation, the Chair (or the Chair's substitute) shall advise the instructor to reconsider the student's semester grade in a manner consistent with proper and stated procedures. If the instructor rejects this advice or fails to comply in a manner satisfactory to the committee, then the committee may undertake an evaluation of the student work in question and assign the grade it deems appropriate.

4. If the student or the instructor wishes to contest the outcome of the departmental review in step three, he or she may request a further review by the Commission on Graduate Studies. To initiate this step in the appeals process, the student or the instructor must submit a written appeal to the Chair of the Commission no later than ten (10) business days after receiving the outcome of the departmental review.

The Commission may collect any evidence it deems necessary, including any written statements that have been generated in the previous stages of the appeals process. The Commission may choose to interview the concerned parties, and it may also choose to conduct a formal hearing.

For the purposes of this process, the voting members of the Commission shall include the faculty representatives on the Commission as well as the Registrar or his or her designee. No faculty member who belongs to the department in question may participate in the Commission's deliberation or decision making.

If the Commission decides that the grade was not based on prejudicial or capricious evaluation, the Chair of the Commission shall give written notification of this decision to the student and the instructor. If the Commission determines that the grade was indeed based on prejudicial or capricious evaluation, the Chair



of the Commission shall advise the instructor to reconsider the student's semester grade in a manner consistent with proper and stated procedures. If the instructor rejects this advice or fails to comply in a manner satisfactory to the Commission, then the Commission may undertake an evaluation of the student work in question and assign the grade it deems appropriate.

5. If either the student or the instructor wishes to contest the outcome of the Commission's review in step four, the appellant may petition the Vice President for Academic Affairs for further consideration. To initiate this step in the appeals process, the student or the instructor must submit a written appeal to the Vice President no later than ten (10) business days after receiving the outcome of the Commission's review. The Vice President may then rule in one of two ways:
  - A. That the decision of the Commission on Graduate Studies will stand as rendered;
  - B. That the Commission on Graduate Studies reconsider its findings and render a decision based on the reconsideration.

This review is the final step in the grade appeals process.

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## Completion of Credit Courses

Credit will not be allowed for a graduate course unless the work of that course shall have been completed and so reported to the Office of the Registrar within one year after official ending of the course.

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## Time Limit

A student is allowed six years in which to complete the master's degree. Under certain circumstances, the student may revalidate by examination courses that are outdated by the time limit. This can be done only with permission of the Department Chair, the graduate program director of the department, and the Commission on Graduate Studies. It is not possible to revalidate courses that have been transferred from another institution and that are out of date.

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# Withdrawal

After a student has been duly enrolled in a class, he or she is considered a member until he or she has been dropped from the class or has withdrawn from the school. Merely discontinuing class attendance does not constitute a drop or withdrawal. Withdrawal from the University or from a course must be submitted to the Office of the Registrar before final examinations begin.

After mid-semester or the first two weeks of a summer session, a student may withdraw with grades of W only with the approval of the Graduate Program Director. Withdrawal without approval will result in grades of F and dismissal from the graduate program.

# Course Catalog

## African American Studies

### Faculty

[William T. Burke III, J.D.](#) , Associate Professor, Business Administration

[Anene Ejikeme, Ph.D.](#) , Associate Professor, History

[Carey H. Latimore IV, Ph.D.](#) , Associate Professor, History; Co-Director

[Kimberlyn Montford, Ph.D.](#) , Associate Professor, Music; Co-Director

[David Rando, Ph.D.](#) , Professor, English

[Michael Soto, Ph.D.](#) , Professor, English

[Claudia Stokes, Ph.D.](#) , Professor, English

[Wilson Terrell Jr., Ph.D.](#) , Associate Professor, Engineering Science

### Overview

The minor in African American Studies is an interdisciplinary program that explores the history and culture of persons of the African Diaspora, and in so doing, examines issues of critical importance to the making of the modern world. While focused primarily on the American experience, the program looks beyond U.S. borders to consider the connections between black persons in Africa, Europe, and the Americas as a whole. In addition, the program hopes to foster closer ties between the University and the African American community in San Antonio.

Completion of the program will be indicated on the student's transcript with the notation "Minor in African

American Studies.” Students interested in the minor should submit an application to the chair of the Faculty Advisory Committee, who will assign a faculty adviser to the student.

## Requirements

The requirements of the African American Studies minor are as follows:

### I. Completion of 18 credit hours in the following distribution:

#### A. Completion of at least 9 hours from the core curriculum:

AFAM 1310	Introduction to African American Studies
ANTH 3327	Race in America (also listed SOCI 3327)
ENGL 2373	African American Literature
HIST 1300	The African Experience
HIST 1370	The African American Experience Through Reconstruction
HIST 1371	The African American Experience Since Reconstruction
HIST 3304	Religion in African History
HIST 3372	Black Images in Film
MUSC 1349	African-American Music
RELI 3482	African Religions in the Americas
SOCI 3327	Race in America (also listed as ANTH 3327)

#### B. Completion of remaining hours from the supporting courses:

AFAM 3310	African American Studies Internship
COMM 3325	Special Topics in Communication Media: Race and Class in Media
ECON 3343	Slavery and the Atlantic Economy (also listed as HIST 3384)
ENGL 2303	American Literature: Colonization to 1900
ENGL 2304	American Literature: New Realism through the Moderns
ENGL 3371	American Literature of the Nineteenth Century: The Turn of the Century
ENGL 4323	Studies in American Literature: The Circum-Atlantic World
ENGL 4323	Studies in American Literature: Harlem Renaissance

ENGL 4326	Seminars on Individual Authors: Thomas Pynchon and Toni Morrison
ENGL 4325	Seminar in Literary Periods: Turn-of-the-Century African American Literature
HIST 1340	Latin American Cultural Traditions
HIST 1360	The History of the United States Through Reconstruction
HIST 1361	The History of the United States Since Reconstruction
HIST 3300	Gender Matters in African History
HIST 3374	The Old South
HIST 3384	Slavery and the Atlantic Economy (also listed as ECON 3343)
MUSC 1346	Jazz History and Styles
PLSI 3352	Civil Rights and Liberties
SPMT 1312	Sport in Society

## II. Additional guidelines for the selection of coursework:

- At least 9 hours of the total shall be upper division courses.
- No more than 12 hours of the coursework (including cross-listed courses) can be taken from one department to fulfill the requirements of the minor.
- When departments offer a relevant “special topics” or “variable content” course, the Faculty

*Advisory Committee may designate such a course as meeting a relevant requirement for the minor.*

## III. All students are strongly encouraged to enroll in AFAM 1310—Introduction to African American Studies and HIST 1300—The African Experience

*\*In special circumstances, students may petition the program’s Faculty Advisory Committee for an exemption to a component of the requirements for the minor.*

## Courses

### AFAM-1310 Introduction to African American Studies

An exploration of key issues in African American studies from multiple disciplinary perspectives. Topics may include black literature, Afrocentrism, race and social justice, rap and “world” music, blacks in prison, African American film and visual art, black families, the black middle class, black internationalism, and gender, among others.

### AFAM-3310 African American Studies Internship

Supervised on and off campus work in an institution serving the African American community in the greater San Antonio area. The particular institution and internship experience must be arranged and approved by the student, the professor, and the institution selected. Supervision and contact with the professor must be maintained throughout the semester. May be repeated for a maximum of six hours credit. Pass/ Fail only.

### AFAM-3-90 Special Topics in African American Studies

From time to time, the program will offer special topics courses not described in the Courses of Study Bulletin. Topics may be in any area(s) of African American Studies and will be offered at the initiative of faculty members. Course may be repeated for credit when topics vary

# American Intercultural Studies

## Faculty

[William T. Burke III, J.D.](#) , Associate Professor, Business Administration; Director

[Peter O'Brien, Ph.D.](#) , Professor, Political Science

[Richard K. Reed, Ph.D.](#) , Professor, Sociology and Anthropology

## Overview

The minor in American Intercultural Studies is designed to develop in students the qualities and skills necessary for intercultural understanding and cooperation in today's diverse society. The minor recognizes that certain historical events and experiences involving race and/or ethnicity in America continue to have a major impact upon the nature and development of intercultural relationships. While underscoring the inextricable connection that exists between the past and the present intercultural dynamic, the minor seeks to enhance positive associations with and among the people of various multicultural communities.

Perspectives coursework focuses on events, conditions, circumstances, major figures and/or movements that are significant to understanding a particular minority group's experience and viewpoint in America.

Dynamics coursework reveals and analyzes the particular contexts that influence or impact intercultural understanding and intercultural relationships.

Completion of the program will be indicated on the student's transcript with the notation "Minor in American Intercultural Studies."

Students interested in the American Intercultural Studies minor should submit an application to the chair of the Faculty Advisory Committee, who will assign a faculty adviser to the student.

## Requirements

The requirements of the American Intercultural Studies minor are as follows:

### **I. Completion of 18 credit hours in the following distribution:**

#### **A. Completion of the nine-hour Required Curriculum.**

1. Three hours in either: ANTH 1301—Introduction to Anthropology OR SOCI 1301—Introduction to Sociology

2. SOCI/ANTH 3327—Contemporary Minorities
3. HCOM 3372/ANTH 3332—Intercultural Communication

B. Nine additional hours from the Core Curriculum (see below), including at least three hours in Perspectives coursework and at least three hours in Dynamics coursework.

## II. Guidelines for selection of coursework:

A. At least nine hours of coursework in the American Intercultural Studies minor must be upper division.

B. No more than 12 hours of the coursework (including cross-listed courses) can be taken from one department to fulfill the requirements of the minor.

### American Intercultural Studies Core\*

Perspectives Coursework	
ENGL 2373	African American Literature
ENGL 4323	Studies in American Literature: The Harlem Renaissance
ENGL 4323	Studies in American Literature: The American Bildungsroman
GNED 3325	The U.S. Latino Experience
GNED 3326	U.S. Latino Cultural and Artistic Expression
HIST 1340	Latin American Cultural Traditions
HIST 1370	The African American Experience Through Reconstruction
HIST 1371	The African American Experience Since Reconstruction
HIST 3340	Latin American Perspectives
MUSC 1346	Jazz History and Styles
Dynamics Coursework	
ANTH 3343	Relaciones fronteras México-Estados Unidos (bilingüe) (also listed as SOCI/INTL 3343)
HIST 1360	The History of the United States Through Reconstruction
HIST 1361	The History of the United States Since Reconstruction
HIST 3363	Early American Social History
HIST 3368	Modern American Culture
INTL 3343	Relaciones fronteras México-Estados Unidos (bilingüe) (also listed as SOCI/ANTH 3343)
PLSI 3352	Civil Rights and Liberties

### Dynamics Coursework

PSYC 2341	Social Psychology
RELI 1360	Religion in the United States
SOCI 2328	Social Inequality (also listed as URBS 2328)
SOCI 3343	Relaciones fronterizas México-Estados Unidos (bilingüe) (also listed as ANTH/INTL 3343)
URBS 2328	Social Inequality (also listed as SOCI 2328)

\*When departments offer a relevant course coded under a “special topics” or “variable content” designation, the Faculty Advisory Committee may approve such course for inclusion within the core curriculum of the minor.



# Arts, Letters, and Enterprise

## Faculty

[Jeanna Balreira, B.A.](#), Strategic Marketing and Communication

[Erin Hood, Ph.D.](#), Center for Experiential Learning and Career Success

[Carl Leafstedt, Ph.D.](#), Associate Professor, Music; Co-Director

[Jack Leifer, Ph.D.](#), Associate Professor, Engineering Science

[Luis E. Martinez, Ph.D.](#), Director, Center for Innovation and Entrepreneurship

[James Shinkle, Ph.D.](#), Professor, Biology

[Jacob K. Tingle, Ed.D.](#), Assistant Professor of the Practice of Business Administration; Co-Director

## Overview

The Arts, Letters, and Enterprise program is designed as an efficient guided way to couple business literacy with any major at Trinity. Two paths exist for students to pursue interest in this area: a Minor and Certification. The requirements for each path are listed below.

## Requirements

- [Minor](#)
- [Certification](#)

## The Minor

The minor in Arts, Letters, and Enterprise is an interdisciplinary program in which students explore various aspects of administering complex organizations in the modern world. The program is designed to afford students the opportunity to further develop the critical thinking, writing, public speaking, leadership, and business literacy skills used in traditional business environments and by those in the arts, theatre, non-profit, technology, and governmental sectors.

Students studying Arts, Letters, and Enterprise are strongly encouraged to study a foreign language beyond the minimum required by the university. Students beginning this minor are also encouraged to take ACCT 1300 prior to MGMT 2301.

Specifically, the Arts, Letters, and Enterprise minor requires:

**I. Completion of a minimum of 21 credit hours as follows (9 of which must be upper division):**

A. Required Courses:

ACCT 1300	Understanding the Language of Business
MGMT 2301	Management of Organizations

and one of the following courses:

ANTH 3368	Anthropological Ethics
COMM 3364	Ethics and the Mass Media
NEUR 3310	Neuroethics
PHIL 1350	Environmental Ethics
PHIL 1354	Ethics
PHIL 1359/BUSN 1359	Professional Ethics
PHIL 2456	Applied Ethics

B. Elective Courses (At least twelve credit hours. At least three credits must be taken from each of the following three categories.):

Please note that the courses listed here are a representative selection of possible courses. Many other courses taught at Trinity may also satisfy certain components in the minor. Students may propose a course not listed below for inclusion in the minor. To do so, they must submit a completed proposal form to the ALE program chair (forms can be obtained from chair). The proposal should detail how the course fits with the ALE minor and requires consent from a faculty member who teaches the course.

**WRITING AND ANALYSIS IN THE HUMANITIES AND SOCIAL SCIENCES**

Courses in the Writing and Analysis section must have a substantial writing component and analytical component. Typically, courses will include a minimum of 15-20 pages of written work. Depending on the faculty member's preference, this total may include multiple shorter papers, one longer paper, or work involving revision in response to faculty or peer critique. One course may be counted towards your major and the ALE minor.

ANTH 3464	Morality and the Marketplace
ART 3314	Issues in Contemporary Art*
ENGL 3414	Advanced Exposition and Argument*
ENGL 3335	Rhetorical Analysis*

FREN 3305	Introduction to French Literature I*
FREN 3306	Introduction to French Literature II*
FREN 4304	Topics in French Literature of the Eighteenth Century*
FREN 4305	Topics in French Literature of the Nineteenth Century*
MUSC 3341	Music History 1: Ancient Greece to Mozart*
MUSC 3342	Music History 2: Classical Era to the Present*
PHIL	All upper division courses**
PLSI 3352	Civil Rights and Liberties
PLSI 3361	Classical Political Thought
PSYC 2401	Statistics and Research Methods
PSYC 3451	Clinical Psychology*
RELI 1320	Ethical Issues in Religious Perspective
RELI	All upper division courses*
SOCI 2306	Intro to Social Psychology
SPAN 3321	Spanish Cinema*

### **Principles of Organizations and Communities**

BUSN/HCOM 3362	Organizational Communication
HCOM 1300	Theories of Communication
HCOM 1333	Public Speaking
HCOM 2304	Interpersonal Communication
HCOM 3360	Small Group Communication
HCOM 3364	Communication and Effective Leadership
PLSI 3303	Elections and Campaigns*
THTR 1343	Improvisation

### **APPLICATIONS**

ALE 3301	Grant Writing and Fundraising*
ALE 4-90	Internship

ART 1310	Design
ART 3314	Issues in Contemporary Art*
ART 2314/ENGL 2340/GNED 2340/MUSC 2340/THTR 2340	Creative Thinking and the Artistic Process
BUSN 2301/ECON 2320	Statistics for Business and Economics
BUSN 3335	Entrepreneurship and Venture Planning*
ENTR 2190	Exploring Entrepreneurship Opportunities*
ENTR 3340	Innovation, Design and Entrepreneurship*
ENTR 3341	Entrepreneurial Planning and Strategies*
MKTG 2301	Principles of Marketing
MKTG 3382	Promotion Management*
MUSC 4321	Applied Music Pedagogy
SPMT 3316	Leadership for Sport Professionals
THTR 3227	Stage Management
THTR 3343	Arts Management

*\*This course has at least one prerequisite.*

*\*\*Excluding PHIL 3-90, PHIL 3-91, and PHIL 4-90.*

**Distribution Requirement:**

No more than six (6) of the elective credit hours used to satisfy the minor requirements may come from any one department. Additionally, ALE minors who are also pursuing any major in the School of Business may not use any Business course other than MGMT 2301 to fulfill this minor.

## Certification

The Arts, Letters, and Enterprise Certification gives students an opportunity to build knowledge while also gaining practical experience in an internship off campus. This path requires fewer hours than the Minor. ALE Certification is especially suited for students pursuing a degree in clinical sciences, engineering sciences, social sciences, or those interested in non-profit management. It requires completion of at least 12 credit hours, as listed below, plus a supervised internship of one-semester duration or the equivalent.

Students may not receive both an ALE minor and certification.

The program offers a certification as a supplement to traditional majors and minors. Students earn the certification by:

**I. Successfully completing a minimum of four of the “Arts, Letters, and Enterprise” courses as detailed below:**

A. Required courses (must complete three of the four listed courses):

GNED 2340	Creative Thinking and the Artistic Process
ACCT 1300	Understanding the Language of Business
ALE 3301	Grant Writing and Fundraising
MGMT 2301	Management of Organizations

One of the following courses:

ANTH 3368	Anthropological Ethics
COMM 3364	Ethics and the Mass Media
NEUR 3310	Neuroethics
PHIL 1350	Environmental Ethics
PHIL 1354	Ethics
PHIL 1359/BUSN 1359	Professional Ethics
PHIL 2456	Applied Ethics

B. Elective courses (At least three credit hours; one course from the following list):

**WRITING AND ANALYSIS IN THE HUMANITIES AND SOCIAL SCIENCES**

Courses in the Writing and Analysis section must have a substantial writing component and analytical component. Typically, courses will include a minimum of 15-20 pages of written work. Depending on the faculty member’s preference, this total may include multiple shorter papers, one longer paper, or work involving revision in response to faculty or peer critique.

ANTH 3464	Morality and the Marketplace
ART 3314	Issues in Contemporary Art*
ENGL 3414	Advanced Exposition and Argument*
ENGL 3335	Rhetorical Analysis*
FREN 3305	Introduction to French Literature I*

FREN 3306	Introduction to French Literature II*
FREN 4304	Topics in French Literature of the Eighteenth Century*
FREN 4305	Topics in French Literature of the Nineteenth Century*
MUSC 3341	Music History 1: Ancient Greece to Mozart*
MUSC 3342	Music History 2: Classical Era to the Present*
PHIL	All upper division courses**
PLSI 3352	Civil Rights and Liberties
PLSI 3361	Classical Political Thought
PSYC 2401	Statistics and Research Methods
PSYC 3451	Clinical Psychology*
RELI 1320	Ethical Issues in Religious Perspective
RELI	All upper division courses
SOCI 2306	Intro to Social Psychology
SPAN 3321	Spanish Cinema*

*\*This course has at least one prerequisite.*

*\*\*Excluding PHIL 3-90, PHIL 3-91, and PHIL 4-90.*

## II. Completion of ALE 4-90 or another preapproved internship experience

Completion consolidates and integrates the learning from ALE with coursework from the student's primary academic discipline. Students taking this class will work for various scientific, governmental, social agency, arts, or non-profit offices as interns. Their responsibilities will be determined by those offices and by supervising faculty. They will then complete a writing assignment in which they relate their experiences in the internship to the goals of the ALE Certificate program.

## Courses

### ALE-3301 Grant Writing & Fundraising

Application in principles and processes involved in fundraising and grant-seeking. Emphasis is on the not-for-profit sector, but the course is also appropriate for students interested in the arts, teaching, and research who anticipate a need for grant & fundraising expertise in their planned careers. Prerequisite: Junior standing.

### ALE-4-90 Internship

The internship is to be a structured professional work experience with an accepted employer in the private, public or non-profit sector. To be recognized, the experience must be pre-approved, must include specific learning objectives, and must include an academic component. An internship is typically done by a student who has attained sufficient preparation in an academic field. The experience may be paid or unpaid. Variations in credit according to the work performed, from 0 to 6 hours. A maximum of 6 hours of internship credit may be applied to a Trinity degree. Prerequisite: Consent of program director.

# Art and Art History

## Faculty

[Laura Agoston, Ph.D.](#) , Associate Professor, Art History

[Douglas Brine, Ph.D.](#) , Associate Professor, Art History

[Lisa Endresen, M.A.](#) , Visual Resources Curator, Art and Art History

[Mark B. Garrison, Ph.D.](#) , Alice P. Brown Distinguished Professor of Art History

[Jessica Halonen, M.F.A.](#) , Associate Professor, Art

[Jongwon Lee, M.F.A.](#) , Associate Professor, Art

[Mark Anthony Martinez](#) , Gallery Manager

[Kathryn O'Rourke, Ph.D.](#) , Associate Professor, Art History

[Kate Ritson, M.F.A.](#) , Professor, Art; Chair

[Adam Schreiber, M.F.A.](#) , Assistant Professor, Art

[Michael Schreyach, Ph.D.](#) , Associate Professor, Art History

[Randy Wallace, M.F.A.](#) , Studio Manager, Art

[Elizabeth Ward, M.F.A.](#) , Professor, Art

## Overview

The Department of Art and Art History features two distinct programs, one in art history, the other in studio art. The art history program explores art and architecture in their historical contexts, while the studio art program teaches the technical and conceptual components of artistic creation.

## Requirements

## The Major

Requirements for the Bachelor of Arts with a major in Art or Art History are as follows:

### I. Departmental requirements:

#### **Art**

A. 40 credit hours of Studio Art, including ART 1410 Design, 2430 Drawing 1, 3314 Issues in Contemporary Art\*, 4394 Senior Seminar, and 4297 Senior Studio.



- i. At least 16 hours are to be completed in upper-division studio art courses with at least one advanced level course in one or more of the following areas: Painting/Drawing, Sculpture, Photography/Digital, and Printmaking.
- ii. A minimum of 4 hours are required from at least two of the following areas: Painting/Drawing, Sculpture, Photography/Digital, and Printmaking.

B. ARTH 1408 Art History II: Renaissance to Modern is required. It is strongly recommended that Studio Art majors take an additional Art History course. Suggested courses: ARTH 1407, 3357, 3360, 3461, 3363, 3364, 3465.

C. Completion of ART 4394 and ART 4297 in the senior year. During the senior year, Studio Art majors are required to have a public exhibition of art works, selected in consultation with the Studio Art faculty of the Department of Art and Art History. Student participation is contingent upon faculty portfolio review. In preparation for this exhibition, students will enroll in ART 4394 in the fall and ART 4297 in the spring semester.

\*NOTE: ART 3314 may be replaced by one of the following courses: ARTH 3357, 3360, 3461, 3363, 3364, or 3465. However, the substitution will not count toward credit hours in Studio Art.

### **Art History**

A. 40 credit hours of Art History, including ARTH 1407, 1408, 4394, and 28 hours, as follows:

- i. 16 credit hours concentrating on art produced before 1800.
- ii. 12 credit hours concentrating on art produced after 1800.
- iii. One of these courses must address non-Western art (ARTH 1309, 1310, 1311, 1413, 2428, 3345, and applicable special topics courses).
- iv. One of these courses must focus on architectural history (ARTH 1412, 1413, 1314, 3322, 3325, 3452, 3454, 3464, 3365 and applicable special topics courses).
- v. At least 16 credit hours must be upper-division courses.

B. Completion of ARTH 4394 in the senior year. The course is generally offered every spring semester.

C. Students contemplating graduate study are encouraged to develop reading expertise in at least one foreign language (French, German, Spanish, Italian, and, depending on specialization, Latin, Greek, Russian, Chinese, Japanese), and to include a period of study abroad in their program. Two semesters of chemistry are strongly recommended for students considering careers in art conservation.

## **II. University requirements:**

Completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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## Admission to Major Status

### **Art**

Prior to the declaration of an Art Major, the student must complete the following three courses with a grade of C or better:

- I. ART 1410 and 2430.
- II. One other ART course at the 1000 or 2000 level.

### **Art History**

Prior to the declaration of an Art History Major, the student must complete at least three courses in Art History or Studio Art with a grade of C or better. At least two of these must be courses in Art History.

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## The Minor in Studio Art

- I. 24 credit hours in Studio Art, including ART 1410 and 2430. At least 12 credit hours are to be completed in upper-division studio courses.
- II. 1 course in Art History.

## The Minor in Art History

24 credit hours in Art History including ARTH 1407, 1408, 2 upper-division courses concentrating on art produced before 1800, and 2 upper-division courses concentrating on art produced after 1800.

## The Minor in Art and Art History

This interdisciplinary program shared between the Art and Art History programs is designed to help students relate an understanding of artistic creativity to their major field of study.

### **Requirements:**

24 credit hours in Studio Art and Art History, 12 hours of which must be in Art History and 12 hours of which must

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be in Studio Art.

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## The Honors Program

### I. University requirements

### II. Departmental requirements:

#### Art

The requirements for Honors in Art are the same as the university requirements, except that the 6 credit hours taken during the senior year are to be devoted to artistic work accompanied by prose explication. A full description of the program is available in the departmental office.

#### Art History

The requirements for Honors in Art History are the same as the university requirements, except that the required 9 credit hours consist of ARTH 4394--Theories and Practice of Art History, taken during the senior year, plus 6 credit hours for the Honors Thesis (ARTH 4398, 4399), taken during the senior year. A full description of the honors program in Art History is available in the departmental office.

## Courses

### Art - General Studies

#### ART-1410 Design

Studio practice in dealing with 2-D and 3-D compositional problems, integrating the visual elements with aesthetic principles and an emphasis on creative solutions. Students may not register for both ART 1410 and THTR 2310.

#### ART-2305 Studio Art for Chemists

This studio based course is offered in conjunction with its companion course, CHEM 2305: Chemistry for the Visual Artist. The application of scientific study with creative studio practice provides a dynamic platform for the making of art work. The frame work for connecting the two fields of study is supported by slide presentations, demonstrations, and studio practice. Guided studio assignments provide the students with an understanding of how the physical and chemical nature of materials can influence and inform creative thinking and artistic expression. Corequisite: CHEM 2305: Chemistry for the Visual Artist.

## ART-2314 Creative Thinking and the Artistic Process

This course encourages students to synthesize a theoretical and experimental approach to the creative process as studied through the visual arts, music, creative writing, and theatre. Students enter into the creative process as means to develop creative self-expression, aesthetic sensibility, and an understanding of the arts. The nature and drive of artistic endeavor is explored through studies of the lives of significant thinkers and artists, examinations of art works, guests lectures, and projects. Students will engage in activities and projects that will enable them to access and develop their own creative thinking skills in concert with traditional, analytic modes. (Also listed as GNEB 2340, THTR 2340, ENGL 2340 and MUSC 2340.)

## ART-2495 Outdoor Studio

Outdoor Studio consists of working excursions to outdoor sites in and around San Antonio. Students in Outdoor Studio create works of art on site and gather information to create or complete work in studio. Traditional landscape media, contemporary strategies, and new technologies are explored. Course includes readings and lectures addressing pertinent environmental questions to enhance understanding of the Texas landscape and to investigate the complex issues surrounding the landscape of today. (Offered every Spring.)

## ART-3113 Guest Artist Workshop

A four-week studio course taught by visiting artists encompassing the sharing of skills and philosophical approaches to artistic problems.

## ART-3314 Issues in Contemporary Art

A seminar in contemporary visual art exploring art theory, practice, and history. The thematic structure will blend historical and contemporary art criticism, exhibitions, and studio practice. The fundamental theories of art making throughout the twentieth century will be explored through the study of drawing, painting, architecture, photography, film, ceramics and sculpture. Prerequisite: ARTH 1407 or 1408.

## ART-3478 Alternative Studio Practices

Alternative Studio Practices is a course that addresses art traditions that are experimental in their media, method and manifestation. Participants will explore methods of art making that are ephemeral and social in nature from within a cooperative/collaborative unit. (Offered every year.)

## ART-3383 Introduction to Game Art

This interdisciplinary course will address the role of the studio arts in contemporary computer game design. Students will work in groups that mirror professional development groups at game development companies where coders, game designers, and artists work together to produce a final product. The course is interdisciplinary, involving students and faculty from the studio arts, computer science, and other fields.

## ART-4383 Advanced Game Art

This course builds on the concepts introduced in ART 3383. Students will be introduced to more advanced tools for digital media creation and may work with 3-D games. Students will work in groups that mirror professional development groups at game development companies where coders, game designers, and artists work together to produce a final product. The course is interdisciplinary, involving students and faculty from the studio arts, computer science, and other fields.

## Art - Drawing

### ART-2430 Drawing I

The presentation and investigation of the technical, conceptual, and aesthetic elements of drawing as they relate to the development of ideas. The study of human figure may be included. (Offered every semester.)

### ART-3430 Drawing II

A continuation of Art 2430. Prerequisite: ART 2430

### ART-4430 Drawing III

A continuation of ART 3430. Course may be repeated for a maximum of 12 credit hours. (Offered every year.) Prerequisite: ART 3430.

## Art - Painting

### ART-2440 Painting I

A basic course in beginning painting techniques and issues in contemporary painting. Prerequisite: ART 1410 or 2430

### ART-3440 Painting II

A continuation of ART 2440. Prerequisite: ART 2440.

### ART-4440 Painting III

A continuation of ART 3440. Course may be repeated for a maximum of 12 credit hours. Prerequisite: ART ART 3440.

## Art - Photography

### ART-2450 Photography I

A basic course in beginning black and white traditional film/darkroom photographic techniques and issues in photography. Preference will be given to Art and Art History majors and minors . (Offered every Year.)

### ART-2451 Thinking Photography

A course rooted in Roland Barthes' notion of the pensive image: "Ultimately, photography is subversive, not when it frightens, repels, or stigmatizes, but when it is pensive, when it thinks." Students will produce, interpret, discuss, and display collaborative work and individual projects. Topics of focus include history of optics; site specificity and the camera obscura; experimental, improvised cameras; the still and the moving image; the unfixed image; the unique image; the beautiful document. (Offered every year.)

### ART-3450 Photography II

This course builds on foundational photographic processes. With an emphasis on aesthetic and conceptual uses of the camera, students explore processes of analog and digital overlap. Additionally, this course explores historically established uses of the photographic medium and their relation in contemporary contexts. (Offered every semester.) Prerequisites: ART 2450 or 2452.

### ART-3452 Photography III

This course builds on photographic processes involving film and digital overlap. Emphasis is on deliberate and experimental use of camera format, creation of an efficient and beneficial workflow, and the production of a cohesive body of photographic prints using a range of inkjet printers. Additionally, this course explores historically established uses of the photographic medium and their relation in contemporary contexts. Prerequisite: Art 3450

### ART-4-50 Advanced Photography

A continuation of ART 3350. Credit may vary from 1-3 semester hours. Course may be repeated for a maximum of 9 credit hours. Prerequisite: ART 3350.

## Art - Digital Photography

### ART-2452 Digital Photography I

This course introduces students to the digital camera and editing platforms as tools for creative and expressive use of the photographic medium. Deliberate use of camera capture functions and file management will be explored

in tandem with editing strategies using Adobe software. Exhibition-grade inkjet printing will be introduced in a fully equipped Mac lab. This course emphasizes the concepts, theory, and history of the photographic medium within the context of contemporary art. Students will produce photographs by a variety of digital means and engage in meaningful discussion and critical analysis of images and image aesthetics. (Offered every semester).

## ART-4-52 Advanced Digital Photography

A continuation of ART 3352. Credit may vary from 1-3 semester hours. Course may be repeated for a maximum of 9 credit hours. Prerequisite: ART 3352.

## Art - Printmaking

### ART-2460 Lithography and Monotype

An introduction to the process and chemistry of lithography and monotype technique through studio experience. 4 studio hours and at least 8 hours outside preparation per week required. May be repeated up to 3 times. (Offered every year.)

### ART-2462 Intaglio and Relief

Introduces the technical and aesthetic characteristics of Intaglio and Relief through studio experience. We will address larger issues of printmaking, and develop a personal vocabulary while exploring these versatile print media. 4 studio hours and 8 hours outside preparation per week required. May be repeated up to 3 times. (Offered every year.)

### ART-2464 Screen Printing

Experience Screen Printing through a hands-on studio class, including hand-drawn and photomechanically applied stencils, color separations, paper/substrate choices and discussions of issues in contemporary printmaking. 4 studio hours and 8 hours outside preparation per week required. May be repeated up to 3 times. (Offered every year.)

### ART-2466 Papermaking

A hands-on studio course in the history and techniques of Asian and European papermaking. The impact of the discovery of paper on the world and its contemporary uses are contextualized through the aesthetics and technical exploration of hand-made paper. 4 studio hours and 8 hours outside preparation per week required. May be repeated up to 3 times. (Offered every year.)

### ART-2468 Bookbinding

Presenting the book-as-object, this course is an exploration of bookbinding through studio practice supported by investigation of the history of the book and evolution of binding styles. With an emphasis on technical skills, we will work with a variety of binding styles and materials to understand how structure and content play off of each other, and explore the definition of what constitutes a book. 4 studio hours and at least 8 hours of outside preparation per week are required. May be repeated up to 3 times.

### ART-3462 Digital and Photo Printmaking

This in-depth studio course uses digital and photographic tools and techniques to develop images in conjunction with and for direct use in hand printmaking. Using the computer as an imagemaking tool, this class combines old and new media and provides an exploration of contemporary printmaking. 4 studio hours and 8 hours outside preparation per week required. May be repeated up to 3 times. (Offered every year.) Prerequisites: ART 2460, 2462, 2464, or consent of Instructor.

### ART-3-60 Topics in Intermediate Printmaking

This course is designed for students who have already taken a course in printmaking and wish to experience a particular printmaking technique in greater depth. The course may be taken more than once, as long as course content changes. Credit may vary from 1 to 3 semester hours. Course may be repeated for a maximum of 9 credit hours. Prerequisite: ART 2460, 2462, 2464, or consent of instructor.

### ART-4-60 Topics in Advanced Printmaking

This course is designed for students who have already taken ART 3-60 and desire to hone their technical skills and conceptual expression at the advanced level. The course may be taken more than once, as long as course content changes. Credit may vary from 1 to 3 semester hours. Course may be repeated for a maximum of 9 credit hours. Prerequisite: ART 3-60 or consent of instructor.

## Art - Sculpture

### ART-2470 Sculpture: Clay I

A beginning level course in sculpture focusing on clay handbuilding techniques, kiln firing, and glaze processes. Issues in contemporary clay sculpture will be explored. Assignments are sequenced to build on the sculptural components of concept, material, process and technique. Students will develop their ideas through participation in the rigorous activity of studio practice. (Offered every semester.)

### ART-2472 Sculpture: Small Metals I

A beginning level course in sculpture focusing on a variety of metalworking techniques in non-ferrous metals.



Some of these techniques include silver soldering, cold connections, and patination. This course is intended to develop the student's conceptual, technical, and design skills, as well as to expand their understanding of the historical importance and continuing relevance of metalworking as an art form. (Offered every semester.)

### ART-2474 Sculpture: Wood

A beginning-level course in sculpture focusing on construction techniques in wood. Issues in contemporary sculpture will be explored. The class is designed to serve as an introduction to basic visual concepts and applications as they apply to the creation and evaluation of sculptural artwork composed primarily of wood material. Students of all skill levels are welcome to enroll. Research assignments will incorporate concepts of visual literacy and terminology as they apply to sculpture. (Offered every year.)

### ART-3472 Topics in Sculpture

From time to time special topics courses in sculpture will be offered. The course may be taken more than one, as long as the course content changes. Prerequisite: Consent of instructor.

### ART-3476 Sculpture: Clay II

Slip Casting incorporates the use of prototypes, plaster molds, and clay slip to create and shape complex sculptural forms. Issues in contemporary clay sculpture are explored through guided assignments and student research. May be repeated up to three times. (Offered every semester.)

## Art - Digital Imaging

### ART-2380 Digital Art

An intensive fine arts studio investigation emphasizing visual problem solving and production. Designed to build visual art making skills and computer proficiency through the introduction of structured studio problems. Emphasis on the expressive and communicative nature of images focusing on the computer as the primary creative medium.

### ART-3380 Advanced Digital Art

A continuation of ART 2380. Research and critique in Digital Art. This course may be repeated up to 3 times. Prerequisite: ART 2380 or consent of instructor.

## Art - Independent Study

### ART-3-90 Special Work in Studio Art

Not to exceed 6 semester hours. Prerequisite: Consent of instructor.

### ART-4-91 Advanced Study in Studio Art

Research and critique in studio work. Not to exceed 12 hours. Prerequisite: Upper-division major in the department or consent of instructor.

## Art - Special Topics

### ART-3-91 Topics in Studio Art

From time to time special topic courses not described in the Courses of Study Bulletin will be offered. The course may be taken more than once, as long as course content changes. Prerequisite: Consent of instructor.

### ART-3-97 Internship

Internships are offered in a variety of professional visual art venues such as museums, galleries and other art institutions. Such work will not exceed 10 hours per week. 1-3 hours per semester, maximum of 6 semester hours. Pass/Fail only. Prerequisites: Junior or senior standing art major or minor and consent of department chair.

### ART-3398 Honors Readings

Independent study in selected areas in preparation for Honors Thesis. Prerequisite: Admission to Honors Program.

### ART-4297 Senior Studio

Concentrated advanced study in studio art in preparation for the senior exhibition. Coursework includes: critiques; museum, gallery and/or artist studio visits; and hands-on experience in organization and installation of the annual senior art major exhibition. ART 4394 and ART 4297 are required in the senior year. Prerequisite: ART 4394.

Corequisite: Highest-level studio art course in the area of the student's concentration. Senior standing with major in Studio Art or consent of instructor.

### ART-4394 Senior Seminar

A combination of seminars, readings, and museum/gallery visits in preparation for portfolio development, senior

exhibition, graduate study, and other art related professions. Fall semester only. ART 4394 and ART 4297 are required in the Senior Year. Prerequisite: Senior standing with major in Studio Art.

### ART-4396 Gallery Practicum

Gallery Practicum is a hands-on course offering instruction and experience in all aspects of the organization and installation of art exhibitions. Students will learn professional gallery management practices by researching exhibition content, arranging loans of artwork, and creating checklists, didactic labels and brochures. Through organizing and installing exhibitions in the university gallery, they will gain valuable experience in the selection, proper handling, placement, hanging and lighting of works of art in exhibitions. Prerequisite: At least one course in Studio Art or Art History.

### ART-4398 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors students in both semesters of their senior year.

### ART-4399 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors students in both semesters of their senior year.

## Art History - Lower Division

### ARTH-1407 Art History I: Prehistoric Through Medieval Art

This course provides an introduction to Art History through a survey of major buildings, archaeological sites, and artworks from Prehistory to the late Middle Ages, focusing on Europe, the Mediterranean, and their fringes. It examines material from various contexts, including Paleolithic France, Pharaonic Egypt, Imperial Rome, and Christian Europe, concluding with Gothic art produced on the eve of the Renaissance. A wide range of sites, structures, and objects in various media are considered in relation to their social, cultural, political, religious and historical contexts. (Offered every semester.)

### ARTH-1408 Art History II: Renaissance to Modern Art

The course is a continuation of ARTH 1407, though it may be taken independently. Art History II is a selective survey of painting, sculpture, and architecture from the late Gothic period to the rise of Modernism. Beginning in the 14th century, the course surveys works of art and architecture created in a variety of contexts, spanning the periods of Renaissance and Baroque Europe, the Enlightenment and Industrial Revolutions, Neoclassicism and Romanticism, and the artistic movements of the 19th century. ARTH 1408 concludes with Modern art and

architecture in Europe, Mexico, and America. Following a roughly chronological order, the course considers the social, sacred, historical, and political functions of art, techniques of production, artistic styles, iconography, and patronage. (Offered every semester.)

#### ARTH-1309 Introduction to Asian Art: India

The origins and development of art and architecture in India set within the religious, political and social context.

#### ARTH-1310 Introduction to Asian Art: China

The origins and development of art and architecture in China set within the religious, political and social context.

#### ARTH-1311 Introduction to Asian Art: Japan

The origins and development of art and architecture in Japan set within the religious, political and social context.

#### ARTH-1314 Art and Architecture of Medieval Europe

This course examines the art and architecture of the Middle Ages in Europe, from the earliest Christian imagery of the fourth century to late Gothic court art, produced around 1400. The geographical range extends from the northern fringes of the British Isles to the borders of the Byzantine world, and a wide selection of buildings and objects will be considered in relation to their social, political and historical contexts, with a particular focus on the development of the Christian tradition. (also listed as GRST 1314) Common Curriculum: This course will only count towards Greco-Roman, Jewish, and Christian Traditions through the Early Modern Period.

#### ARTH-1412 Art and Architecture of Latin Americas Since the 16TH Century

This course examines the rich and diverse art of the Americas since the arrival of Europeans in the sixteenth century. It considers the architecture, painting, sculpture, photography, and planning of this region with the aim of understanding the distinctive elements of Latin American art as well as its commonalities with the art of Europe and the United States. The course will consider works in relations to the dramatic social and political changes of the last five centuries and the ways in which the study of the art of Latin America complicates established art historical narratives. (Offered every year.)

#### ARTH-1413 Art and Archaeology of Ancient Egypt

A survey of the major monuments and sites of ancient Egypt, with a focus on the Predynastic period, the Old Kingdom, and the New Kingdom. (Offered every year.)

#### ARTH-2428 Art and Archaeology of Mesopotamia and Persia

A survey of the major monuments and sites of ancient Mesopotamia and Persia, modern day Iraq and Iran respectively, with a focus on the visual expression of royal power in art and architecture. Prerequisite: Completion of three semester hours of Art History.

### ARTH-2430 Art and Patronage At the Court of Burgundy

This course provides an introduction to the visual arts at the Burgundian court, from its inception in the late 14th century under Philip the Bold to the regency of Margaret of Austria in the early 16th century. During this era, the area now known as northern France, Belgium, and the Netherlands was governed by the dukes and duchesses of Burgundy and their Habsburg successors. Under their rule, it became the dominant force in northern Europe and the court's dazzling splendor set the standard for princely magnificence throughout the Renaissance. The political, social, and religious concerns of the Burgundians will be explored through the paintings, sculptures, textiles, metalwork, and manuscripts they commissioned from Sluter, Van Eyck, Van der Weyden, and their contemporaries. (Offered every other year.)

## Art History - Upper Division

### ARTH-3320 The Minoan-Mycenaean Civilization

This course deals with the rediscovery of the Aegean Bronze Age civilizations of the Crete and Mycenae, using an interdisciplinary approach based on material from archaeology, anthropology, and the Homeric epics. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3321 Greek Vase Painting

The development of the shape and decoration of Greek pottery from the Geometric period through the end of the Classical era. The characteristics of individual artists and the treatment of Greek myths in different periods are studied. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3322 Greek Architecture

The development of Greek architecture from the Geometric period through the Hellenistic period. The development of the temple is emphasized, but private and public buildings, city planning, and religious sanctuaries are also considered. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3325 Roman Art and Architecture

This course examines the major monuments and art styles in the city of Rome and the Roman provinces from the Republic to the Imperial period, ending with the reign of Constantine the Great. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3330 Art and Architecture in the Late Classical World

This course will consider the art and architecture of Roman, Jewish, Christian, and early Islamic communities from the later Roman Empire to the seventh century CE. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3335 Pre-Columbian Art of Mesoamerica

This course is a survey of the art of the ancient peoples of Mesoamerica. It will examine the art of a variety of major groups, including the Olmec, the Maya, the Toltec, the Zapotec, the Mixtec, and the Aztec, as well as other indigenous peoples of Western Mexico and the Gulf Coast. (Same as ANTH 3335.)(Offered every other year.)

### ARTH-3339 Art At the Courts of Europe, C. 1330 - 1416

This course examines the extensive artistic enterprises undertaken at the papal, imperial, royal, and ducal courts of northern and central Europe in the fourteenth century. Often labeled "International Gothic," the course assesses the validity of this term for a broad selection of artworks and addresses such issues as: taste, display, and luxury; the changing role of female patrons; technical innovation and expertise; and the hierarchies and interrelations of different media. One key theme is the emergence of individual artists; identities and so particular consideration is given to patrons' changing relationships with their court artists, including Simone Martini, Master Theodoric, Claus Sluter, and the De Limbourg brothers.

### ARTH-3440 Northern Renaissance Art in the Fifteenth Century

The 15th Century saw an explosion in artistic production in Northern Europe. Technical advances, increasingly sophisticated markets, and an unquenchable thirst for images, meant that commissioning and owning works of art were no longer the preserve of kings and popes. The course explores this phenomenon by considering how art was made, valued, and viewed in France, Germany, and the Netherlands, from c. 1400 to c. 1500. Key themes, including the role of the alterpiece, popular devotion, technical innovations, and the international demand for Northern art, are explored through the work of Van Eyck, Van der Weyden, Memling, Schongauer, and their contemporaries. (Also listed as GRST 3440.)(Offered every other year.) Prerequisite: Completion of 3 semester hours of Art History, Sophomore standing, or consent of instructor.

### ARTH-3441 Early Renaissance Art in Italy

This course is a selective introduction to the art of Italy in the early renaissance, the period of the late thirteenth to the late fifteenth centuries. The course will pay particular attention to the cultural identity of Florence as well as

Siena, Rome, and Venice. We will be studying the visual arts in relation to politics, religion, literature, and philosophy of the period as a distinctive cultural accomplishment. We will trace the careers of major artistic figures, such as Giotto, Masaccio, Brunelleschi, Donatello, and Botticelli not as isolated examples of genius but within the religious, social, economic, political, and historical contexts in which they functioned. The association of art and power dominates this period, and we will consider the interrelationship of structures of patronage within the church, the formulation of civic identity, gender, the imagery of political rule among leading families, particularly the Medici, and the changing status of the artist. Prerequisite: Completion of three semester hours of Art History, sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3442 Age of Leonardo: Art and Architecture in Italy 1475 - 1568

Art History 3442 is a selective introduction to the art and architecture of Italy from 1475-1568. The course will pay particular attention to the major artistic centers of Florence, Rome, Milan and Venice. We will be studying the visual arts in relation to the politics, religion, culture and society of the period as a distinctive accomplishment. We will trace the careers of major figures of the period (Leonardo, Bramante, Raphael, Michelangelo, Titian and Palladio) within the religious, social, economic, political, and historical contexts in which they functioned. (Offered every other year). Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3343 Italian Baroque Art

This course will examine the art and architecture of Italy in the late sixteenth and seventeenth centuries, with emphasis on the major figures and cultural factors associated with Baroque movements. In addition, this course may follow the impact of Italian Baroque art and architecture elsewhere in southern and northern Europe. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3344 Northern Renaissance Art in the Sixteenth Century

This course examines the making and meaning of the visual arts in France, Germany, England, and the Netherlands, from c.1500 to c.1600. Artworks in various media are considered in relation to their original contexts, from the workshops of Nuremberg and the markets of Antwerp to the French court at Fontainebleau and the Tudor court in England. Key themes, including the impact of printmaking, the challenge of the Reformation, and the influence of Italian art, are explored through the work of Durer, Grunewald, Holbein, Bruegel, and their contemporaries. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3345 Spanish Colonial Art and Architecture In Mexico

A study of the arts of Mexico from Conquest to Independence (1521-1821), with special attention to architecture and to architectural painting and sculpture. The study also includes the Spanish sources of this art (the Late

Gothic, Plateresque, Renaissance, Baroque, and Neo-Classical stylistic periods) and the persistence of indigenous forms, images, and sensibilities. The course includes original material at hand: the San Antonio Missions and works in the San Antonio Museum of Art. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3446 Jan Van Eyck and His Legacy

The course investigates the life, work and reputation of Jan van Eyck and his place within the history of Western art. Incorporating the latest research on the artist and a range of methodological approaches, the course explores the intended audience, function and meaning of van Eyck's paintings, together with those of his workshop, his followers and his imitators in the Burgundian Netherlands. Particular attention will be paid to the historical, social and religious contexts of his artworks, and the later history of their reception. (Offered every other year).

Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3447 Michelangelo: A Media-based Approach

Media, the plural of medium, refers to the materials from which a work of art is made. ARTH 3447 approaches the body of Michelangelo's work by media: drawing, painting, sculpture, and architecture. Additionally, we will consider the artist's poetry and letters in detail. Michelangelo was distinctive in his period for his mastery across the media and the course is designed to consider his technical accomplishments. ARTH 3447 will introduce students to the major monuments of the artist's career but also some of the most important social, cultural, political, philosophical and theological movements that occurred in fifteenth and sixteenth century Italy. We will also consider the image of the artist constructed in contemporary biographies. (Offered every other year.) Prerequisite: One course in Art History

### ARTH-3351 Nineteenth-Century Art: Romanticism and Impressionism (c. 1800-1900)

This course investigates European art from the French Revolution to Impressionism. During this time, rapid modernization of industry and technology, combined with social and political transformations, caused equally radical changes to occur in many aspects of visual arts, from its formal appearance to its significance for society. Emphasis is given to understanding the interrelationships between various historical contexts and visual form.

Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3452 Nineteenth-Century Architecture and Urbanism

An examination of the architecture and urban development of Western Europe and the United States from the late eighteenth century to the 1890s, with special attention to the theoretical, social, and political contexts in which major works were created. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.



## ARTH-3353 Nineteenth-Century American Art

American fine arts and architecture from early nationhood to the World's Columbian Exposition of 1893. Emphasis on the cultural forces shaping the arts and artists, along with major figures and movements. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

## ARTH-3454 Mexico City

This course examines the architectural and urban history of Mexico City, analyzing its founding by the Aztecs in the fourteenth century, its transformation into a center of Spanish colonial splendor, and its re-invention as a booming twenty-first century mega-city. The course will also consider how travelers, artists, and critics have represented this dynamic metropolis throughout its 700-year history. Prerequisite: Completion of three credit hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

## ARTH-3357 History of Photography

This course examines the artistic practices and the critical accounts which constitute the history of photography, from the 1830s to the present. Emphasis is given to the historical contextualization and visual analysis of key technologies, techniques, movements, styles, artists, and artworks, combined with close readings of primary and secondary texts. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

## ARTH-3359 Modernism in the Visual Arts

This course examines the artistic practices and the critical accounts which constitute "Modernism" in the visual arts, from the mid-nineteenth century. Emphasis is given to the historical contextualization and visual analysis of key modernist artworks, combined with close readings of primary and secondary texts. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

## ARTH-3360 Twentieth-Century Art: Cubism to Conceptualism (c.1900-1970)

This course introduces students to the major twentieth century artists, works, movements, and art theories in Europe and the United States, circa 1900 to 1970. While concretely investigating a diversity of art practices, the course also considers the central relationship during this period between art and critical theories of modernism and postmodernism. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

## ARTH-3461 Public Art Across the Border

This course considers the public art of Mexico and the United States, and the rich cross-border exchanges between and among Mexican and U.S. artists in the twentieth and early twenty-first centuries. The course will examine the work of several artists in depth, explore the intimate relationship between public art and social and political reform, and analyze the changing place of public art in popular and art historical discourses. Special attention will be given to Mexican Muralism and its influences. (Offered every other year). Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3362 Theories and Art of the Russian Avant-Garde

The main artistic movements and artists in Russia from 1880-1930: Symbolism, Primitivism, Futurism, Suprematism, Constructivism. Special attention will be given to the works of Vrubel, Malevich, Kandinsky, Tatlin, and El Lissitzky. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3363 Contemporary Art and Culture Since 1945

This course examines the artistic practices and critical accounts which constitute contemporary art, from the 1940s to the 1990s. Relationships between avant-garde artistic activities and social, cultural, and political critique are a central focus. Since this is not a survey class in the traditional sense, extensive reading in both historical and critical materials will be required. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3464 Twentieth-Century Architecture and Urbanism

This course covers architecture and urban development from the 1890s to the 1960s. Emphasis on ideological, theoretical, national, and popular architectural movements, primarily in Western Europe and the United States. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3365 Contemporary Architecture

This course covers architecture and urban development from the 1960s through the present. Emphasis on the artistic, ideological, theoretical, and political factors that shape contemporary built environments, with primary focus on the United States, Western Europe, and Japan. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3376 Contemporary Chinese Art

This course covers the development of art in China from 1976 (post-Cultural Revolution) to the present, including performance art, easel painting, concept art, women's art, etc. Aesthetic and stylistic changes will be examined in

historical, societal, intellectual, and cultural contexts. (Also listed as CHIN 3376.) (Offered every Spring.)

### ARTH-3-90 Independent Study in Art History

Independent study in selected areas. 1 to 3 semester hours; may be repeated for a total of no more than 6 hours. Prerequisites: 6 advanced hours in Art History and consent of instructor.

### ARTH-3391 Topics in Art History

From time to time special topic courses not described in the bulletin will be offered. Topics will generally cut across the chronological divisions of period courses, dealing instead with broader issues in Art History. May be repeated on different topics. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3392 Women's Studies in Art History

Course content will vary depending on the instructor but may include some of the following: women as artists and architects, images of women in art and society, feminist methodology, or women as patrons of art. Course may be repeated with different topics for a maximum of six semester hours. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3393 Museum Studies

This course will focus on specific topics in the history, nature, and operation of the art museum. Specific issues may include: connoisseurship, documentation, the impact of the museum on the development of art, the nature of arts patronage, the function and purpose of the museum, and debates over the issues of censorship and/or community responsibility. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3395 Colloquium in Museum Studies

This course will provide an experiential overview of the artistic, educational, and commercial functions of the modern art museum in a colloquium setting. Students will have the opportunity to work in the classroom and on-site with museum professionals in San Antonio and the region. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-3-97 Internship

Internships are offered in conjunction with museums, art agencies, and art professionals in the San Antonio community and beyond, or may involve an introduction to visual resources management in the Department's Visual

Resources Collection. Each internship must be directed by a faculty member who will draw up an agreement between the sponsoring institution or office, the student, and the department outlining the scope and requirements of the course. 1-3 hours per semester, maximum 6 semester hours. Elective credit only. Pass/Fail only. Prerequisite: Approval by Department Chair.

### ARTH-4394 Theories and Practice of Art History

This seminar, required of majors in their senior year (and recommended for minors), will give historical and methodological perspectives on the discipline of Art History. The leading approaches used in the field will be studied, using art historical writings from the Renaissance to the present. The course is generally offered each Spring semester. Prerequisite: Completion of three semester hours of Art History, or sophomore standing, or consent of instructor, is prerequisite for taking upper-division Art History courses.

### ARTH-4395 Seminar in Art History

From time to time courses will be offered that will provide an in-depth study of selected artists or problems. Prerequisite: Consent of instructor. May be repeated for a maximum of six credits.

### ARTH-4396 Gallery Practicum

Gallery Practicum is a hands-on course offering instruction and experience in all aspects of the organization and installation of art exhibitions. Students will learn professional gallery management practices by researching exhibition content, arranging loans of artwork, and creating checklists, didactic labels and brochures. Through organizing and installing exhibitions in the university gallery, they will gain valuable experience in the selection, proper handling, placement, hanging, and lighting of works of art in exhibitions. Prerequisite: At least one studio art or art history course.

### ARTH-4398 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors students in both semesters.

### ARTH-4399 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors students in both semesters.

# Biomathematics

## Faculty

[Farzan Aminian, Ph.D.](#) , Professor, Engineering Science

[Eduardo Cabral Balreira, Ph.D.](#) , Professor, Mathematics; Co-Director

[Kevin Livingstone, Ph.D.](#) , Associate Professor, Biology; Co-Director

[Peter Olofsson, Ph.D.](#) , Professor, Mathematics

[David Ribble, Ph.D.](#) , Professor, Biology

## Overview

The Biomathematics minor is an interdisciplinary program designed primarily for students majoring in math or biology who are interested in the expanding field of mathematical modeling of biological phenomena.

## Requirements

## The Minor

The requirements for a Biomathematics minor are as follows:

### I. The Core (21 hours)

BIOL 1311	Integrative Biology I
BIOL 1111	Introductory Biology Laboratory
BIOL 2312	Cells and Cell Systems
BIOL 2112	Cell Systems Laboratory
BIOL 2413	Genes, Phenotypes, and Evolutionary Dynamics
MATH 1311	Calculus I
MATH 1320	Statistical Methods
MATH 2308	Introduction to Analytical Models

### II. Advanced Interdisciplinary Study (7 hours)

Complete one of the following pairs of courses. The BIOL course should be taken first for either option, as the MATH course will build on the knowledge from the BIOL course. The two MATH courses are offered alternate years, so students should check with the MATH department to ensure they can complete their desired option.

#### **Ecology option**

BIOL 3434	Ecology
MATH 3328	Mathematical models in Life Sciences

or

#### **Genetics option**

BIOL 3450	Genetics
MATH 3327	Probabilistic Models in Life Sciences

### **III. Contemporary Topics and Research in Biomathematics (at least 2 hours)**

Complete all of the following:

BIMA 2094	Seminar in Biomathematics I
BIMA 3-90	Independent Research in Biomathematics (at least one hour)
BIMA 3194	Seminar in Biomathematics II

## **Courses**

### **BIMA-2094 Seminar in Biomathematics I**

This discussion format course focuses on contemporary subjects in biomathematics chosen by the instructor and students. (Offered every semester) Prerequisite: Consent of instructor

### **BIMA-3-90 Independent Research in Biomathematics**

Individual Research in biomathematics conducted with faculty. Course credit will depend on the nature and scope of the proposed research project. Prerequisites: Consent of the instructor and approval from the minor director

### **BIMA-3391 Special Topics in Biomathematics**

Advanced study of a topic or field not covered by other courses. May be repeated for credit for different topics.

(Offered occasionally). Prerequisites: consent of instructor

## BIMA-3194 Seminar in Biomathematics II

This discussion format course focuses on contemporary subjects in biomathematics chosen by the instructor and students. Students will also be expected to present the results of their own research project, including relevant background from the literature. (Offered every semester) Prerequisite: BIMA 2094 and Consent of instructor

# Biology

## Faculty

[Gerard Beaudoin III, Ph.D.](#) , Assistant Professor

[Frank Healy, Ph.D.](#) , Professor

[Michele Johnson, Ph.D.](#) , Associate Professor

[Jonathan King, Ph.D.](#) , Professor; Chair

[Kevin Livingstone, Ph.D.](#) , Associate Professor

[Kelly Lyons, Ph.D.](#) , Associate Professor

[Troy Murphy, Ph.D.](#) , Associate Professor

[Gabriela Rennebeck, Ph.D.](#) , Lecturer

[David Ribble, Ph.D.](#) , Professor; Associate Vice President for Academic Affairs

[James Shinkle, Ph.D.](#) , Professor

[Bethany Strunk, Ph.D.](#) , Assistant Professor

## Overview

The Department of Biology engages and supports students in a dynamic learning environment that promotes a broad, integrated, and interdisciplinary understanding of biological systems. The introductory biology curriculum emphasizes the core concepts and competencies described by the National Science Foundation in Vision and Change, and upper-division courses provide an opportunity to develop greater depth in select areas. The department supports a variety of interdisciplinary programs and encourages joint student-faculty research projects.

## Requirements

- [The Major](#)
- [Guidelines for Acceptance of Majors](#)
- [Honors in Biology](#)
- [Minor in Biology](#)
- [Bachelor of Science Degree in Biochemistry and Molecular Biology](#)
- [Honors in Biochemistry and Molecular Biology](#)
- [Teacher Certification in Biology](#)



# The Major

The requirements for the degree of Bachelor of Science with a major in Biology are as follows:

## **I. A minimum of 32 credit hours of biology distributed as follows:**

A. Area A: BIOL 1311, 1111, 2312, 2112, and 2413.

B. Area B: Students complete one of the following concentrations.

1. **Ecology and Evolution.** BIOL 3301 and three courses from the following list: BIOL 3420, 3426, 3427, 3424, or 3435.
2. **Cellular and Molecular Biology.** BIOL 3302 and three courses from the following list: BIOL 3450, 3451, 3457, 3458, 3459, 3462, 3463, 3466, or 3474.
3. **Individualized Program.** BIOL 3301 or 3302 and three additional courses selected in consultation with the student's advisor from the lists in 1 or 2.

C. 3 additional hours in biology at the 2000 level or higher.

D. BIOL 4201 or BIOL 4399

## **II. CHEM 1318, 1118, 2319, and 2119; MATH 1311; and MATH 1320 or PSYC 2401.**

## **III. One of the following options:**

A. CHEM 2320 and 2220 and one of the following: CHEM 3330, CHEM 3334, or ENGR 2311.

B. PHYS 1309, 1111, 1310, and 1112.

C. CSCI 1320, MATH 1312 or MATH 2308, and an upper division MATH or CSCI course approved by the student's advisor.

D. GEOS 2400 and one course from GEOS 2401, 2304, 3402, or 3310.

## **IV. Completion of BIOL 4001 and 4002**

**V. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

# Guidelines for Acceptance of Majors

Full acceptance in the major is granted if the following requirements are met at the time of application:

1. Completion of BIOL 1311, 1111, 2312, and 2112 with grades of C- or better in each class.
2. Completion of CHEM 1318, 1118, 2319, and 2119 with grades of C- or better in each class.
3. An overall grade point average of at least 2.0.

Students who do not meet the above criteria may be granted provisional acceptance if it is judged that there is a reasonable expectation they can complete the degree program.

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## Honors in Biology

Biology majors are eligible to enroll in the Honors Program if they satisfy the University requirements that are described elsewhere in this bulletin. During their junior year, honors candidates should identify a faculty mentor and meet with the Department Chair. Completion of the Honors Program includes six hours of research courses (BIOL 4398 and 4399). Honors candidates must submit to the Department Chair a written proposal to graduate with Honors in Biology prior to starting BIOL 4398. The decision to confer or not to confer honors will be made by the departmental faculty and will be based on the quality of the written thesis and the oral presentation of that thesis.

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## Minor in Biology

A student may minor in Biology by satisfying the following requirements:

- I. Completion of BIOL 1311, 1111, 2312, 2112, and 2413.
  - II. Completion of either BIOL 3301 or 3302
  - III. Completion of one additional four credit hour course from Area B.
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# Bachelor of Science Degree in Biochemistry and Molecular Biology

The requirements for the degree Bachelor of Science with a major in Biochemistry and Molecular Biology are as follows:

## I. Departmental requirements

A. At least 47 credits in chemistry and biology, distributed as follows:

1. Core Courses. BIOL 1311, 1111, 2312, 2112, 2413, 3474, CHEM 1318, 1118, 2319, 2119, 2320, 2220, 3330, 2130, 3131, 3334, and 4340; BIOL 3000 or CHEM 3000 (1 semester).
2. Advanced Electives. Two courses chosen from the following list (one from each department): BIOL 3450, 3458, 3466, CHEM 3432, 4346, 4347, or the combination of 3321 and 3121.

B. Math 1311, 1312

C. PHYS 1309, 1111, 1310, 1112

II. **University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

## Guidelines for Acceptance of Majors

Full acceptance is granted if the following requirements are met at the time of application:

- I. Completion of CHEM 1318, 1118, 2319, 2119, 2320, 2220 and BIOL 1311, 1111, 2312, 2112, and 2413 with grades of C or better.
- II. Completion of MATH 1311 with a grade of C or better.
- III. A grade point average of at least 2.0 on all other university work.

Provisional acceptance may be granted if it is apparent that an applicant can meet the requirements for full acceptance by the end of the semester in which application is made.

# Honors in Biochemistry and Molecular Biology

Students may undertake honors under the direction of faculty in either the Biology or Chemistry Departments. The procedures and requirements will be determined by the department affiliation of the research mentor. These are described in the Biology and Chemistry sections of this bulletin.

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## Teacher Certification in Biology

Students majoring in biology can receive certification to teach biology in grades 4-8 and grades 8-12. In order to receive certification, students major in biology, complete 11-14 undergraduate hours of education coursework, and complete the Master of Arts in Teaching graduate program at Trinity. After this course of study, students would have a B.S. in Biology, a master's in teaching, and teacher certification in Texas. For more information and specific requirements, see the Education Department's program description in the course catalogue.

## Courses

### BIOL-1307 Biological Impact and Issues

The content of this course will deal with the impact of biological knowledge on the issues of society and culture. Examples of the topics to be discussed are as follows: the influence of the concepts of evolution on human thought and society; medical science and its manipulation of the human body; gene pool alteration and the resultant restructuring of life; agricultural science and its effect on nutrition and human population; impact of the alteration of the environment on the biological world. (Offered every year).

### BIOL-1308 The Microbial Mothership

Chemical, Geological and fossil data suggest that the earth is about 4.5 billion years old, and that bacterial life was present on earth for at least 3 billion years before any evidence of humans is found. The emergence of complex multicellular organisms such as humans has taken place in intimate association with microbial communities; and the present-day human-microbe association, the "metaorganism", is the product of an expansive and complex coevolutionary process. We have only recently begun to recognize the complexity and importance of the interrelationships that have evolved over millennia between human and animal cells and their associated microbial communities. In this course we will develop a framework to aid our understanding of the species diversity and critical interspecies dependencies (microbe-microbe and microbe-human) that comprise the human microbial mothership. We will explore the tools and technologies used to characterize and analyze complex microbial communities. We will examine how microbial community composition influences such things as autism and diabetes. We will also explore the impact of perturbations to metaorganismal communities on health and well-

being, for example the effect of antibiotics and dietary changes. (Offered every other year).

### BIOL-1309 The Nature of Cancer

This course is a survey of cancer biology examining the development, progression and treatment of the disease(s). A major emphasis will be on using a scientific framework to understand the disease along with the many myths and misperceptions. The course is designed as a studio course that includes both lectures and laboratory experiments during the class period. Additionally, there will be four required field trips during the semester that will require a total of sixteen hours on weekends. A minimum of one half of the course meeting times will be laboratory activities. (Offered every other year).

### BIOL-1320 The Darwinian Revolution

Populations change through time, and understanding how and why they change is central to the study of biology. But, this wasn't always the case. In the Nineteenth Century, as Charles Darwin was developing the theory of evolution by natural selection, most scientists and the public alike believed that plants and animals were static, not changing since the time of creation. Thus, the writings of Darwin transformed our understanding of the dynamic natural world. His ideas have further shaped the fields of medicine, agriculture, and social policy, and motivated great works of art and literature. This discussion-based course will explore the development of Darwin's revolutionary ideas through a survey of his life, his major written works, and the influence of his writing on modern thinking. (Offered every year).

### BIOL-1322 The Ecology and Bioconservation of China

The course will focus on the fundamentals of ecology and how these are important in determining the current distribution and abundance of plants and animals in China. The course will also examine the current human impacts on native biodiversity in China and what conservation practices are in place. Through this course students will engage in a collaborative group project in which they will collect data on a particular element of biodiversity near the United International College (UIC), Zhuhai, China. (Offered Occasionally).

### BIOL-2301 Advanced Placement Biology

Students earning a 4 or 5 on the Advanced Placement Biology exam or a 5, 6, or 7 on the Higher-Level International Baccalaureate Exam will receive credit for this course.

### BIOL-2305 The Science of Novel Environments

This course explores the scientific background supporting the literature studied in CMLT 2301, World Literature and the Environment, and CMLT 2350, Science Fiction. Two themes are emphasized: 1) ecological and physical approaches to studying the environment; and 2) the organismal biology, genetics, and molecular biology of crop plants as related to global agriculture and genetically modified organisms. This course is organized around a mixture of lectures and discussion. Hands-on/laboratory experiences are incorporated. Prerequisite or Corequisite:

CMLT 2301 or 2350.

## BIOL-2306 Infectious Diseases

This course will examine the biology of infectious diseases and the role of these diseases in global and public health policy. The lecture will consider disease organisms ranging from viral to helminthic and their associated vectors. The laboratory component of this lab/lecture course could focus on a number of aspects such as: 1) transmission of disease by water, 2) the role of sanitation in disease prevention, and 3) examination of selected life cycles of infectious agents as they contribute to disease. Trips to local public health sites are required and will take place outside of the regular class schedule. (Offered every other year). Prerequisite: BIOL 1311 and 1111

## Area A: The Core

### BIOL-1311 Integrative Biology I

This course is designed to introduce students to the wide range of knowledge in the biological sciences and to the methods that have built this knowledge base. The course is organized around a series of topic-based modules, each of which will integrate modern biological approaches at the cellular, organismal, and population levels. Modules for this first semester course include global change, the evolution of sexual reproduction, or other contemporary topics. (Offered every Spring) Corequisite: BIOL 1111

### BIOL-1111 Introductory Biology Lab

This is an introductory course that provides an understanding of the scientific methods used to investigate biological questions and how the results of these studies are communicated. The semester is divided into investigative modules in which student groups learn a technique, conduct an experiment or study, and write their results in the form of a scientific paper. (Offered every Spring.) BIOL 1311 must be taken concurrently.

### BIOL-2112 Cell Systems Laboratory

Laboratory experiences that support the Cells and Cell Systems course. Emphasis on development of student competency in the laboratory for the design, execution and analysis of a biological investigation. Students will be expected to demonstrate competency in liquid handling, microscopy, data acquisition with various instruments and aspects of data analysis using R. (Offered every Fall). Prerequisites: BIOL 1311/1111 and CHEM 1318 or 1300  
Corequisites: BIOL 2312

### BIOL-2312 Cells and Cell Systems

This course addresses structure and function of cells using selected examples from biological systems to illustrate core biological concepts and motivate development of science competencies. Students will be expected

to learn how cells regulate processes; how these processes relate to system function; how the physical world influences cell behavior; how to analyze and interpret experimental findings from both primary data and research literature; and how to predict cell and cell system behavior. (Offered every Fall.) Prerequisites: BIOL 1311/1111 and CHEM 1318 or 1300 Corequisites: BIOL 2112

### BIOL-2413 Genes, Phenotypes, and Evolutionary Dynamics

This course uses a single biological theme, for example human-viral interactions, to illustrate core biological concepts and motivate development of science competencies. Students are expected to learn how the structures of biological molecules relate to their functions; how biological information is stored and retrieved in diverse organisms; how mutation and selection have led to genetic changes and what molecular evidence supports evolution through time; how biological systems interact; and how to construct mathematical models that lead to testable predictions. (Offered every Spring) Prerequisite: BIOL 2312/2112

## Area B: Courses

### BIOL-3301 Experiential Learning in Ecology and Evolution

This is a field-based, inquiry-driven course that emphasizes hypothesis-testing in the natural world. In close collaboration with biology faculty in an ecological field setting, students will design and conduct field experiments on a variety of topics in ecology and evolution. The objectives of the course are for students to gain hands-on experiences with organisms in the field; develop the skills, techniques, and methods of analysis required to conduct biological field studies; communicate the results of scientific studies; and gain an appreciation for natural history. This course will enhance students' ability in critical thinking in the context of their upper division courses in ecology and evolution. Class time will be used to learn important techniques and means of analysis for field studies. Students will be required to participate in two overnight field trips and one four-day field excursion in mid- to late-March. (Offered every Spring). Prerequisites: Biol 2413, Chem 1318, 1118, and one upper division biology course in the ecology and evolution area (3420 through 3435) or Microbiology (Biology 3458). A statistics course is highly recommended.

### BIOL-3302 Experiential Learning in Cell and Molecular Biology

The course focuses on modern laboratory techniques in cell and molecular biology. Research skills are developed through hypothesis generation, experimental design, implementation, data analysis, and scientific communication. Students will conduct guided-inquiry projects utilizing technologies such as flow cytometry, confocal microscopy, gene expression analysis, and quantitative modeling. Students will be required to complete 3 hours/week in lab and 1 hour weekly in recitation. Students will be expected to maintain projects outside scheduled laboratory sections. (Offered every Spring). Prerequisites: one upper-level Area B Biology course in the cell and molecular area (BIOL 3450–3474).

## BIOL-3420 Animal Behavior

This course will investigate both evolutionary and proximate aspects of animal behavior. Using the logical framework of the four levels of analysis, we will cover: 1) the adaptive value of specific behaviors and the role of natural selection in maintaining behaviors; 2) how behaviors have evolved over time; 3) how behaviors develop within an individual; and 4) the neural, hormonal, and physiological mechanisms underlying behaviors. Lectures will cover a variety of topics, including: natural selection and evolution; genes and the environment; animal learning and cognition; hormones and their role in mediating behavior; neural mechanisms; foraging behavior; predator-prey interactions; sexual selection; animal communication; courtship and mate choice; and social behavior. In addition to lectures, we will develop skills to understand and interpret primary literature, which will be facilitated through group-discussions of journal articles. The laboratory will focus on developing skills of hypo-deductive inquiry, and on the design, implementation, and analysis of experiments that will be carried out in the laboratory and field. As part of the laboratory, students will develop a sophisticated and in-depth review of the literature focusing on a specific topic of animal behavior, culminating in a final paper and a presentation to the class. Prerequisite: BIOL 2413, CHEM 2319, 2119

## BIOL-3426 Vertebrate Evolution

This course is an evolutionary survey of vertebrates that will focus on major evolutionary innovations and systematic relationships, and major features of the anatomy, physiology, life history, and behavior of vertebrate taxa. The laboratory includes studies of evolutionary adaptations, surveys of taxa, field trips to the San Antonio Zoo and other locales, and identification of local vertebrates. Grades for the course will be determined from lecture exams, laboratory practicals, one comprehensive final exam, and the students' choice of a library report or field-based project. One weekend field trip is required. (Offered every Fall). Prerequisites: BIOL 2413, CHEM 2319, 2119

## BIOL-3427 Plant Biology

This course is a comprehensive study of plants from a variety of perspectives including plant morphology, anatomy, physiology, evolution, and ecology. The course will also cover plant ethnobotany, biogeography, and the taxonomy of several notable plant families. The laboratory is designed to give students experience with live and preserved specimens and laboratory and field techniques frequently associated with the study of plants. Students will apply skills learned in the core courses to the processes of experimental design and hypothesis testing by conducting experiments that are pertinent to the current literature. Some experiments will require time outside of scheduled lab for care of experimental subjects. The course includes two week-day and one weekend field trip. (Offered every Spring) Prerequisite: BIOL 2413, CHEM 2319, 2119

## BIOL-3434 Ecology

This course is designed to facilitate students' understanding of how biotic and abiotic factors determine abundance and distribution of organisms in natural communities and how scientists study these phenomena. Principal ecological theory serves as a framework for the course. This course is also designed to facilitate student learning of laboratory and field techniques to make observations; design experiments; and measure and analyze



information about the biotic and abiotic world. Exams and assignments are designed to assess if students have learned how to 1) analyze information across levels of ecological organization and apply what they learn to new situations, 2) critically evaluate published research, 3) develop sound ecological questions and hypotheses, 4) design and implement experiments to test hypotheses, 5) analyze and interpret data, and 6) communicate findings in written and oral format to the class and in a manner that would translate to the scientific community. The course is constructed as a combination of interactive discussions and activities designed to reinforce student engagement with an electronic textbook and field-based laboratory. Students will be outside for most laboratory sessions and are required to attend a weekend field trip. (Offered every year). Prerequisites: Biol 2413, Chem 2319, 2119. Strongly recommended: PSYC 2401 or MATH 1320.

## BIOL-3435 Evolution

This course will survey the history of evolutionary thought, the mechanisms and patterns of evolutionary change, and the methods scientists use to study evolution. Topics to be explored include evolution by natural and sexual selection, neutral drift, fitness and adaptation, modes of speciation, phylogenetics, extinction, and applications of evolution in modern medicine. The laboratory portion of the course will include methods to describe and measure diversity, to experimentally create diversity, and to use evolutionary statistics to address broad biological questions. Some experiments will require time outside of scheduled lab. (Offered every Year). Prerequisites: BIOL 2413, CHEM 2319, 2119. Strongly Recommended: MATH 1320 or PSYC 2401

## BIOL-3440 Costa Rican Ecology

Middle America, the region extending from central Mexico to Colombia, is one of the most biologically diverse regions of the world with a high degree of endemism (species found nowhere else). This diversity and endemism have resulted from a complex tectonic and climatic history that has promoted the evolution of different species. The objective of this course is to explore this diversity across different ecoregions of Costa Rica, focusing on the diversity and abundance of small to medium-sized mammals at elevations ranging from sea-level rainforests and dry forests to high-elevation cloud forests. The course will begin by studying rainforest ecology at the Osa Peninsula and then transitioning up the coast of Costa Rica to sea-level dry forests and the highlands of the Monteverde area to study the biodiversity on both the Pacific and Caribbean sides of the Tilaran mountains. While the focus will be surveying and sampling mammals, students will also study the flora, fauna, and cultural elements in these different regions. Additionally, we will explore the unique Costa Rican cultural character and some of the reasons for this uniqueness and engage in a service project in the Monteverde area. (Offered every other year). Prerequisites: BIOL 2413, CHEM 1318, 1118 .

## BIOL-3450 Genetics

An understanding of genetics is fundamental to most studies in biology because of the central role of heredity in life and evolution. This course will use a text and primary literature to study the following subjects and principles: Mendelian inheritance of qualitative and quantitative characters and probabilistic analysis of heredity; the molecular nature of genes, including the basic classes and functions of genes and regulation of transcription in both prokaryotic and eukaryotic systems; and the behavior of genes in populations, including mathematical

treatments of Hardy-Weinberg equilibrium and the five evolutionary forces (mutation, migration, selection, drift, and non-random mating). The laboratory will use model systems to investigate these basic principles. Some experiments will require time outside of scheduled lab hours. Prerequisites: BIOL 2413, CHEM 2319, 2119

### BIOL-3451 Microanatomy

Structure-function relationships are explored through an analysis of animal histological features. The microscopy-based laboratory examines tissues by means of comparisons of normal and pathological features. Student performance is measured by in-class exams, written reports, oral presentations, and a course project. Computer imaging and analysis are integrated into the fabric of the course along with several case studies. Prerequisites: Biol 2413, Chem 2319, 2119.

### BIOL-3457 Neurobiology

Neurobiology focuses on the organization and function of nervous tissues and systems. The course begins with an anatomical overview, followed by an examination of neural system function at the level of signaling and synaptic transmission, sensory systems, and central system integration and control. With this foundation, the course explores brain development and plasticity. Additional hours are required to monitor experiments. (also listed as NEUR 3447). (Offered every year). Additional Prerequisites: BIOL 2413, NEUR 2310, and CHEM 2319, 2119

### BIOL-3458 Microbiology

The study of microbial organisms is of tremendous importance in our world today. This course emphasizes the basic biology of bacteria, including their varied morphology, growth and nutritional requirements, cell motility, gene regulation, mechanisms of antibiotic resistance, and bacterial interactions as populations and with other organisms. Other topics covered include viruses and the Archaea. The impact of microbes on medicine, public health, agriculture and biotechnology are discussed. In addition to exams, a research paper on a recent topic from the primary research literature in microbiology is required. The laboratory covers diverse techniques on manipulation and growth of bacterial cultures, microscopy, testing of environmental samples, bacterial genetics and molecular biology, and identification of unknown organisms. Multiple experiments are run concurrently. Students are expected to visit the lab on days other than the assigned period to monitor experiments. (Offered every Spring) Prerequisites: BIOL 2413 and CHEM 2319, 2119.

### BIOL-3459 Endocrinology

A study of the function of the endocrine system and how it regulates the metabolic processes of living organisms. The course begins with a hormone synthesis/action and then progresses through the functional endocrine systems including stress, reproduction, pregnancy, energy, balance and bone. Attention will also be given to neuro-endocrine mechanisms involved in regulating these systems. 3 class hours, 3 laboratory hours a week for one semester. (Offered every other year.) Prerequisites: BIOL 2413 and CHEM 2319, 2119

### BIOL-3462 Vertebrate Physiology

This course is a study of the principles of homeostasis with emphasis on major vertebrate organ systems. This course begins with a detailed molecular investigation of excitable membrane physiology (nerve and muscle) followed by a systematic investigation of endocrine, cardiovascular, respiratory, renal and gastrointestinal physiology. Integrative problem sets are assigned to address the complex interactions between organ systems. Laboratory experience involves experimentation with sophisticated physiological equipment and computerized data acquisition systems to reinforce concepts presented in lecture. Lecture examinations, laboratory reports, homework problem sets, and a research paper with presentation will be used to assess student understanding in this course. Prerequisites: Biol 2413, Chem 2319, 2119.

### BIOL-3463 Developmental Biology

Through integration of information from various biology subdisciplines, course topics include the following: vertebrate body plan patterning, genetic control of the *Drosophila* body plan, early morphogenesis, cell differentiation, organogenesis, gamete formation, and fertilization. The laboratory follows development using microscopy and through special projects involving several animal systems, including avian. Course assessment includes in-class examinations, oral presentations, and group projects. Additional laboratory hours are required to monitor experiments. Prerequisites: Biol 2413, Chem 2319, 2119.

### BIOL-3466 Cell Biology

Cells form the basic working units of organs and the systems that organs comprise. This course is designed to build an understanding of the fundamental processes that govern the operations of cells. Cells face challenges of maintaining boundaries, communicating with neighboring cells, transporting essential components across barrier membranes, generating chemical energy, regulating cell phenotype, and maintaining cell structure. In order to function as part of a specialized tissue or organ, cells elaborate specific subsets of organelles to dedicate themselves to performing specific functions. The course will provide the background to understand the cellular mechanisms of specialized cells, and allow one to predict the underlying cellular physiology of most tissue systems. The laboratory takes an investigative approach, introducing microscopic, molecular, and biochemical tools for studying cells. Grades for the course are to be determined by in-class examinations and laboratory reports. Additional Prerequisite: BIOL 2413, CHEM 2319, 2119; at least one Area B course or CHEM 3330

### BIOL-3474 Molecular Biology

The focus of this course is the gene. The lecture portion of the course considers the major topics of gene structure, expression, duplication, and recombination. The laboratory takes an investigative approach and offers experimentation in protein electrophoresis, northern blotting, reporter gene expression, PCR-based gene cloning and sequencing, and microarray screens. Lecture and laboratory principles are reinforced through computer-based problem-solving projects using genome databanks. Grades for the course are to be determined by in-class examinations, the projects, and laboratory reports. 3 lecture hours, 3 laboratory hours a week for one semester. Prerequisites: BIOL 3458, 3466, or CHEM 3330.

## Area C: Technique and Research Concentration

### BIOL--91 Selected Topics

Study of a topic or field not covered by other courses. Lower division offerings will provide an introductory approach to a topic. Upper division courses will involve in-depth analysis of a specific area and will usually require prerequisite courses, at the discretion of the instructor. May be repeated for credit on different topics.

### BIOL-3000 BCMB Seminar

Students must attend a minimum of 10 scientific seminars. Appropriate seminars are those offered by the Department of Biology, the Department of Chemistry, the Department of Physics and Astronomy, the Neuroscience Program, and/or seminars presented as part of the Distinguished Scientist Lecture Series. Pass/Fail.

### BIOL-3-90 Independent Study

Individual work arranged with a faculty member on problems in biology as indicated by the student's preparation and interest. Attendance at the weekly Biology Seminar is required. Credit may be from 1 to 3 hours per semester with no more than 6 cumulative credit hours possible. Prerequisites: Consent of instructor and approval of a study/research plan submitted to the department chair prior to the semester of enrollment in the course.

### BIOL-3-92 Research Internship

Off-campus study in a research laboratory arranged by the student. Prior written approval of a faculty member and departmental permission are required. Guidelines are available in the departmental office. May be repeated for a maximum of 3 credit hours. Graded on a pass/fail basis.

### BIOL-3-93 Practical Internship

Off-campus study in a professional biology setting arranged by the student. Credit will be granted for internships, externships and shadowing limited to those that incorporate academic biology content. Prior written approval of a faculty member and departmental permission are required. Guidelines are available in the departmental office. May be repeated for a maximum of 3 credit hours. Graded on a pass/fail basis. Credit for BIOL 3-93 may not be used to satisfy the "three additional hours in biology at the 2000 level or higher" component of the requirements for the Biology major.

### BIOL-4001 Senior Comprehensive Exam

Each September or early October, those Biology majors who have earned 90 total credits or 23 hours in Biology by the end of the preceding semester, will take the Biology Major Field Test (MFT). Students will be required to attend a one hour meeting held early in the fall semester; the examination will be administered on a Saturday soon

thereafter . Alternative arrangements will be made for students unable to take the exam at the scheduled time because of University commitments. Students will receive a grade of Pass for completion of the test, but performance on the exam will factor into the grade for BIOL 4002.

### BIOL-4002 Senior Retrospective

Students will meet with their advisors during the first day of class and schedule a series of meetings that will guide them in the preparation of a written summary addressing the following: 1) A review of each student's performance on the MFT describing the strengths and weaknesses of the student's preparation; 2) A comparison of the MFT results to the courses taken and grades received and; 3) An assessment of how the student's performance might have been affected by course selection, course content or learning environment, or the student's own learning strategies. In some instances a student might be advised to change their course selection for their final semester based upon their test score. Grades assigned for this course will be based on a combination of the MFT score and the quality of the student's written summary.

### BIOL-4201 Biology Senior Seminar

Built around the Biology Department's seminar series, students will interact with seminar speakers visiting campus to discuss readings provided by the speaker the week before. Students will maintain a journal that briefly summarizes the readings and logs thoughts about the significance of the work, how it extends what has been learned in biology classes at Trinity, and what major questions the work raises. After the discussion, students will attend the seminar to learn about the broader context of the work. Prerequisite: Senior standing and biology major.

### BIOL-4351 Conservation Biology

This course will explore the cross-disciplinary nature of conservation biology, which is the applied science of maintaining the earth's biological diversity. Students will lead weekly discussions on the various sub-disciplines of conservation biology and their applications, including evolution, ecology, genetics, and economics. A detailed case history analysis of a local conservation issue will be required. Prerequisite: An upper division course in biology or consent of instructor.

### BIOL-4398 Senior Seminar and Thesis Research I

The purpose of this course is to provide opportunity and guidance in research under the direction of a faculty member. Students must submit a progress report to the department chair if they plan to enroll in BIOL 4399. Attendance at the weekly Biology Seminar, which consists of presentations of original research from diverse fields of Biology, is required. Prerequisites: Senior standing and submission of a formal research proposal to the department chair prior to the semester of enrollment in the course.

### BIOL-4399 Senior Seminar and Thesis Research II

This course is a continuation of student projects begun in BIOL 4398. Students are required to write a thesis and

make an oral presentation of their research project at an appropriate venue. Attendance at the weekly Biology Seminar is also required. Prerequisite: BIOL 4398.

# Chemistry

## Faculty

[Bert D. Chandler, Ph.D.](#) , Professor

[Christina B. Cooley, Ph.D.](#) , Assistant Professor

Ryan Davis, Ph.D. , Assistant Professor

[Laura M. Hunsicker-Wang, Ph.D.](#) , Associate Professor

[Brittany E. Long, Ph.D.](#) , Instructor

[Corina Maeder, Ph.D.](#) , Assistant Professor

[Christopher J. Pursell, Ph.D.](#) , Professor; Chair

Jason Shearer, Ph.D. , Semmes Distinguished Professor

[Adam R. Urbach, Ph.D.](#) , Professor

[Marilyn D. Wooten, Ph.D.](#) , Instructor

## Overview

Six degree programs are offered to students interested in a major in chemistry:

- Bachelor of Science degree in Chemistry
- Bachelor of Science degree in Biochemistry
- Bachelor of Science degree in Applied Chemistry
- Bachelor of Science degree in Biochemistry and Molecular Biology
- Bachelor of Arts degree in Chemistry
- Bachelor of Arts degree in Chemistry with High School Teaching Certification

The Bachelor of Science degrees in Chemistry and Biochemistry are four-year courses of study designed for those students who plan to be professional chemists and biochemists. Both of these programs meet the standards set by the American Chemical Society to train chemists for industry and graduate programs in chemistry and biochemistry.

The Bachelor of Science degree in Biochemistry and Molecular Biology is offered jointly with the Department of Biology, and meets the needs of students preparing for graduate studies at the interface of chemistry and biology. Course offerings in this program are balanced between Chemistry and Biology, whereas the B.S. in Biochemistry coursework is primarily in Chemistry.

The Bachelor of Arts program is suitable for students who desire a core degree in Chemistry and provides the flexibility to couple that desire with other interests and opportunities. Students earning the B.A. in Chemistry can go on to graduate study, and this degree is appropriate for students interested in art conservation, premedical

training, secondary school teaching, and interdisciplinary studies such as biophysics, environmental sciences, oceanography, and toxicology. The B.A. in Chemistry with High School Teaching Certification provides the necessary coursework to enter into secondary school teaching or to enter professional training programs like Trinity's MAT program.

All students interested in a major are encouraged to begin research involvements during their first and sophomore years. The course offering "Research Techniques and Applications" (CHEM 1190) provides students with the opportunity to be engaged in the ongoing research programs of chemistry faculty, and a significant component of this experience will involve the use of sophisticated instrumentation for specific research applications. The junior-senior course "Independent Research in Chemistry and Biochemistry" (CHEM 3-90) then allows experienced students to undertake suitably challenging projects with faculty.

## Requirements

- [Bachelor of Arts Degree](#)
- [Bachelor of Arts Degree with High School Teaching Certification](#)
- [Bachelor of Science Degree in Chemistry](#)
- [Bachelor of Science Degree in Biochemistry](#)
- [Bachelor of Science Degree in Applied Chemistry](#)
- [Guidelines for the Acceptance of Majors](#)
- [The Minor](#)
- [Honors in Chemistry](#)
- [Bachelor of Science Degree in Biochemistry and Molecular Biology](#)
- [Honors in Biochemistry and Molecular Biology](#)

## Bachelor of Arts Degree

The requirements for the degree of Bachelor of Arts with a major in chemistry are as follows:

### I. Departmental requirements:

- A. 31-32 credits in chemistry: CHEM 1318, 1118, 2319, 2119, 2320, 2220, 3330, 2130, 3001, 3432, 3334, 3135, 3321, 3121, and one upper division course selected from CHEM 3335, 4242, 4340, 4346, or 4347.
- B. MATH 1311, 1312.
- C. PHYS 1111, 1112, 1309 or 1311, 1310 or 1312.

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.



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# Bachelor of Arts Degree with High School Teaching Certification

The requirements for the degree of Bachelor of Arts with a major in chemistry with 8-12 teacher certification are as follows:

## I. Departmental requirements:

- A. 32 credits in chemistry including CHEM 1318, 1118, 2319, 2119, 2320, 2220, 3330, 2130,3001, 3432, 3334, 3335, 3135, 3321, 3121.
- B. MATH 1311, 1312.
- C. PHYS 1111, 1112, 1309 or 1311, 1310 or 1312.
- D. EDUC 2203, 3320, 3331.

The recommended full Education Course of Study to teach high school chemistry is: (a) EDUC 1105 and 1106 for first year students; (b) EDUC 2202, 2203 or 3303, 3320, 3331, 3342; (c) EDUC 4100.

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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# Bachelor of Science Degree in Chemistry

The requirements for the degree of Bachelor of Science with a major in chemistry are as follows:

## I. Departmental requirements:

- A. 44 credits in chemistry: CHEM 1318, 1118, 2319, 2119, 2320, 2220, 3330, 2130, 3001, 3101, 3190, 3432, 3334, 3135, 3321, 3121, 3335, 4242, 4250 and two courses selected from 4340, 4346 and 4347. Students may substitute an advanced course in molecular biology, engineering science, or physics for one of the two advanced electives in chemistry. This substitution must be approved by the department chair.
- B. MATH 1311, 1312, plus one additional course from MATH 2321 or 3316.
- C. PHYS 1111, 1112, 1309 or 1311, 1310 or 1312.

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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# Bachelor of Science Degree in Biochemistry

The requirements for the degree of Bachelor of Science with a major in biochemistry are as follows:

## **I. Departmental requirements:**

- A. 39 credits in chemistry: CHEM 1318, 1118, 2319, 2119, 2320, 2220, 3330, 2130, 3001, 3101, 3131, 3432, 3334, 3135, 3321, 3121, 4242, 4340, and one course chosen from 3335, 4346, and 4347.
- B. BIOL 1311, 1111, 2312, 2112, 2413.
- C. CHEM 3190 or BIOL 3190.
- D. PHYS 1111, 1112, 1309 or 1311, 1310 or 1312.
- E. MATH 1311, 1312.

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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# Bachelor of Science Degree in Applied Chemistry

The requirements for the degree of Bachelor of Science with a major in applied chemistry are as follows:

## **I. Departmental requirements:**

- A. 34 credits in chemistry, including CHEM 1318, 1118, 2319, 2119, 2320, 2220, 3330, 2130, 3190, 3001, 3101, 3432, 3334, 3135, 3321, 3121, 3335.
- B. ENGR 2311, 4366, 4357 or 4358, one additional course selected from ENGR 2359, 3323, 4357, 4358, 4341.
- C. One additional advanced elective course selected from CHEM 4340, 4242, 4250 or an upper division engineering science course.
- D. MATH 1311, 1312, 2321, 3316.
- E. PHYS 1311, 1111, 1312, 1112.
- F. ECON 1311.

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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# Guidelines for the Acceptance of Majors

Full acceptance is granted if the following requirements are met at the time of application:

- I. Completion of CHEM 1318, 1118, 2319, 2119, 2320, 2220 with grades of C or better.
- II. Completion of MATH 1311 with a grade of C or better.
- III. A grade point average of at least 2.0 on all other university work.

Provisional acceptance may be granted if it is apparent that the applicant can meet the requirements for full acceptance by the end of the semester in which application is made.

Transfer students will be accepted provisionally pending completion at Trinity of at least one upper division chemistry course, which includes lab, with a grade of C or better.

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## The Minor

A minor in chemistry may be obtained by successful completion of a minimum of 20 hours in chemistry, to include CHEM 1318, 1118, 2319, 2119, 2320, 2220, 2130, and at least 6 additional hours in upper division courses. CHEM 3001 and 3101 cannot be used towards satisfying the upper division course requirement.

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## Honors in Chemistry

In addition to the minimum requirements for an honors thesis described earlier, the Department of Chemistry has the following requirements:

### **Application and Procedures**

Students planning to write an Honors Thesis in Chemistry should discuss research opportunities with at least three faculty members. Normally the choice of research director will be made in the first semester of the Junior year, although students with extraordinary research experience, including research during a summer, may defer the choice of research director for one or two semesters.

### **Requirements**

The Honors Program in Chemistry requires a minimum of nine credit hours of research normally arranged over three semesters. At least six of these hours must be taken in the senior year and devoted to the thesis

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research. If a student has worked full-time on research related to the thesis for a minimum of ten weeks during one summer, the department may waive the requirement for three of the nine credit hours. Submission of the final research report for the summer is required for this waiver.

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## Bachelor of Science Degree in Biochemistry and Molecular Biology

The requirements for the degree Bachelor of Science with a major in Biochemistry and Molecular Biology are as follows:

### I. Department requirements

A. At least 47 credits in chemistry and biology, distributed as follows:

1. Core Courses. BIOL 1311, 1111, 2312, 2112, 2413, 3474, CHEM 1318, 1118, 2319, 2119, 2320, 2220, 3330, 2130, 3131, 3334, and 4340; BIOL 3000 or CHEM 3000 (1 semester).
2. Advanced Electives. Two courses chosen from the following list (one from each department): BIOL 3450, 3458, 3466, CHEM 3432, 4346, 4347, or the combination of 3321 and 3121.

B. MATH 1311, 1312

C. PHYS 1309, 1111, 1310, 1112

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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## Guidelines for Acceptance of Majors

Full acceptance is granted if the following requirements are met at the time of application:

- I. Completion of CHEM 1318, 1118, 2319, 2119, 2320, 2220 and BIOL 1311, 1111, 2312, 2112, and 2413 with grades of C or better.
  - II. Completion of MATH 1311 with a grade of C or better.
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Provisional acceptance may be granted if it is apparent that an applicant can meet the requirements for full acceptance by the end of the semester in which application is made.

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## Honors in Biochemistry and Molecular Biology

Students may undertake honors under the direction of faculty in either the Biology or Chemistry Departments. The procedures and requirements will be determined by the department affiliation of the research mentor. These are described in the Biology and Chemistry sections of this bulletin.

### Courses

#### CHEM-1118 General Chemistry Laboratory

Emphasis is placed on the development of laboratory skills that are fundamental to experimental chemistry. Laboratory operations include the use of modern potentiometric and spectrophotometric methods of analysis as well as traditional gravimetric and volumetric procedures. Corequisite: CHEM 1318.

#### CHEM-1190 Research Techniques and Applications

Involvement in ongoing research programs with individual faculty. Information retrieval, chemical and instrumental methods, and experimental design for the solution of specific problems are emphasized. 6 laboratory hours a week for 1 semester. Prerequisite: Consent of instructor.

#### CHEM-1300 Introduction to Chemistry

Introduction to the fundamental concepts of chemistry including the mole, stoichiometry, balanced reactions, electronics structure, chemical bonding, and intermolecular interactions with modern examples. An emphasis will be placed on problem solving involving mathematics. CHEM 1300 provides a thorough preparation for CHEM 1318. Lecture, 3 hours per week.

#### CHEM-1301 The Chemistry of Crime

The study of forensic chemistry, with an emphasis on the scientific basis for the various techniques used in solving crimes. The course is designed as studio course which includes both lectures and laboratory experiments during the class period. The course will contain a minimum of 25 hours of laboratory activities. Two field trips on Friday afternoon/Saturday morning may be required. This course is intended for students who major in a non-science discipline. No student who has already fulfilled (or who is currently enrolled in a course fulfilling) the Using

Scientific Methods section of the Understanding Natural Science and Technology portion of the Common Curriculum.

### CHEM-1305 The Chemistry of Art

The study of the chemical foundation of the art world. Topics range from a study of the historical development of technical innovations and discoveries which impacted the evolution of art, to the chemical and physical properties of artists' materials, to an introduction to conservation and the analysis of works of art. The course is designed as a studio course which includes both lectures and laboratory experiments during the class period. A minimum of one half of the course meeting times will be laboratory activities. This course is intended for students who major in a non-science discipline. Credit for CHEM 1305 will not be given to those students who have already fulfilled (or who are currently enrolled in a course fulfilling) the Using Scientific Methods section of the Understanding Natural Science and Technology portion of the Common Curriculum.

### CHEM-1318 General Chemistry

Fundamental concepts in chemical science, taught from perspectives of chemistry in the modern world, with emphasis placed on quantitative problem solving. Course content will include stoichiometry and mass relationships, properties of solutions, atomic structure, molecular structure and bonding, intermolecular forces, chemical equilibrium, thermodynamics and kinetics. Lecture, 3 hours per week. Credit for the Common Curriculum will not be granted for both CHEM 1300 and CHEM 1318. Prerequisite: Passing the Chemistry Placement exam or CHEM 1300. Co requisite: CHEM 1118.

### CHEM-2119 Laboratory Methods in Organic Chemistry

The laboratory stresses modern techniques for the preparation and analysis of organic compounds. Infrared spectral analyses and chromatographic separations are introduced. Laboratory, 3 hours per week. Corequisite: CHEM 2319. Prerequisite: CHEM 1118 or equivalent.

### CHEM-2130 Advanced Chemical Principles Laboratory

Emphasis is placed on the development of foundational laboratory techniques and skills, including attention to details and precision. Utilizing quantitative instrumental techniques, students build a deeper level of experimentation and problem solving skills while becoming increasingly independent. Laboratory, 3 hours per week. Prerequisite: CHEM 2320

### CHEM-2220 Chemical Synthesis Laboratory

Continued development of student laboratory experience with emphasis on organic and inorganic syntheses. Nuclear magnetic resonance spectroscopy, use of Chemical Abstracts, and technical writing are emphasized. Laboratory, 5 hours per week, alternate weeks; discussion session 1 hour each week. Pre- or Corequisite: CHEM 2320. Prerequisite: CHEM 2119.

## CHEM-2305 Chemistry for the Visual Artist

The study of the chemical foundations of the visual arts. Topics range from a study of the historical development of technical innovations and discoveries that impacted the evolution of art, to the chemical and physical properties of artists' materials, to an introduction to conservation, and the analysis of works of art. The course is designed to include both lectures and laboratory experiments during the class period. A minimum of one half of the course meeting times will be laboratory activities. A field trip may be included. The laboratory activities will be expanded and built upon in the co requisite course, ART 2305. This course is intended for students who major in non-science discipline. No student who has already fulfilled (or who is currently in a course fulfilling) the Using Scientific Methods section of the Understanding Natural Science and Technology portion of the Common Curriculum may register for CHEM 2305. Students may register for one of CHEM 1305 or CHEM 2305. Co requisite: ART 2305: Studio Art for Chemists.

## CHEM-2319 Organic Chemistry I

Introduction to the basic principles of organic chemistry through studies of the structures, properties, and reactions of carbon-based compounds. Lecture, 3 hours per week. Corequisite: CHEM 2119. Prerequisite: CHEM 1318 or equivalent.

## CHEM-2320 Organic Chemistry II

The continuation of Chemistry 2319 with emphasis on structure-activity relationships, mechanisms, and synthesis of complex organic compounds. Lecture, 3 hours per week. Prerequisite: CHEM 2319

## CHEM-2340 Application of Chemical Principles

Application of chemical structure, thermodynamics, and kinetics to a broad range of problems, including acid-based reactions, redox reactions, and energy production. Lecture, 3 hours per week. Prerequisite: CHEM 2319

## CHEM-3000 BCMB Seminar

Students must attend a minimum of 10 scientific seminars. Appropriate seminars are those offered by the Department of Biology, the Department of Chemistry, the Department of Physics and Astronomy, the Neuroscience Program, and/or seminars presented as part of the Distinguished Scientist Lecture Series. Pass/Fail.

## CHEM-3001 Chemistry Seminar I

Exposure to the breadth of chemistry through attendance at the department seminar. Students will have the opportunity to interact with the speaker and discuss the work in greater detail. Short essays based on the lectures and reading from the chemical literature will be assigned for the student to assess the significance of the work and place it into the larger scientific context. Pass/Fail only.

## CHEM-3101 Chemistry Seminar II

Exposure to the breadth of chemistry through attendance at the department seminar. Students will have the opportunity to interact with the speaker and discuss the work in greater detail. Short essays based on the lectures and readings from the chemical literature will be assigned for the student to assess the significance of the work and place it into the larger scientific context. Course may be repeated up to three times. Pass/Fail only.

Prerequisite: CHEM 3001

## CHEM-3121 Inorganic Chemistry Laboratory

Synthesis, spectroscopy characterization, and reactivity studies of inorganic compounds. Students will develop advanced synthesis and characterization techniques, and will become familiar with the Inorganic Chemistry literature. In the second half of the semester, students may be able to develop individual projects relating to the broader fields of interest. Laboratory 3 hours per week. Prerequisite CHEM 2220, 3334. Pre-or Corequisite: CHEM 3135, 3321, or consent of instructor.

## CHEM-3131 Biochemistry Laboratory

An introduction to modern experimental biochemistry. The course emphasizes analytical and physical methods used in isolating and determining the properties of proteins, and nucleic acids. Laboratory, 3 hours per week.

Prerequisites: CHEM 3330, 2220.

## CHEM-3135 Physical Chemistry Laboratory

Experimentation in physical and biophysical chemistry using modern laboratory techniques and instrumentation. The emphases of the course are to illustrate physical chemistry principles and to develop careful and critical experimental expertise. Topics covered include chemical kinetics, thermodynamics and equilibrium. Laboratory, 3 hours per week. Prerequisites: CHEM 3334, 3432

## CHEM-3321 Inorganic Chemistry

Chemistry of the main group and transition metal elements, with emphasis on the application of fundamental chemical principles to trends in stability and reactivity. Topics include atomic theories, bonding, molecular structure, symmetry and group theory, acid-base theories, thermodynamic properties, kinetics and reactivity, redox properties, coordination compounds, organometallic chemistry, solid state chemistry, catalysis and bioinorganic chemistry. Lecture 3 hours per week. Prerequisite: CHEM 2320, 3334. Co-requisite: CHEM 3121.

## CHEM-3330 Biochemistry I

The structure and function of biological molecules. The course emphasizes protein and nucleic acid structure and metabolism, mechanisms of enzyme action, membrane structure and dynamics, and energy production, storage, and utilization. Lecture, 3 hours per week. Prerequisite: CHEM 2320



## CHEM-3334 Physical Chemistry I

Emphasis is placed on the effect of temperature, pressure, volume and chemical composition on chemical equilibrium and reaction rates through the development of fundamental principles of chemical thermodynamics and reaction kinetics. Lecture, 3 hours per week. Pre- or Corequisite: PHYS 1309 or 1311. Prerequisites: CHEM 1318; MATH 1308 or 1312.

## CHEM-3335 Physical Chemistry II

A continuation of Chemistry 3334 with emphasis on quantum mechanical approaches to chemical structure and dynamics, statistical mechanics, and theoretical developments in chemistry. Lecture, 3 hours per week. Pre- or Corequisite: PHYS 1310 or 1312. Prerequisite: CHEM 3334.

## CHEM-3380 Chemistry Peer Tutor

Peer tutoring in a lower division chemistry course. Under the guidance and supervision of the course instructor, tutors will assist students in learning chemical concepts and in developing problem solving skills. Office hours and class attendance required. Course may be repeated for a maximum of 6 credit hours. (Offered occasionally.) Prerequisite: Consent of instructor

## CHEM-3-90 Independent Research in Chemistry and Biochemistry

Analyses directed to the solution of a problems having mutual student and faculty interest. All available instrumental and technical resources appropriate to this research are employed. Oral and written communication of results are required. 6 laboratory hours a week per credit hour. An end of semester written report is required. Attendance at departmental seminars is expected. Prerequisite: Junior standing.

## CHEM-3398 Honors Reading

Independent study in selected areas in preparation for Honors Thesis. May be taken for up to three hours of credit. Prerequisite: Consent of instructor.

## CHEM-3432 Analytical Chemistry

Principles of quantitative chemical analysis. Discussions will include topics such as sampling, statistical analysis, experimental design and optimization, chemical equilibrium, volumetric and gravimetric techniques, electrochemistry, and elementary instrumental analysis. Typical laboratory experience includes volumetric analysis and elementary instrumental analysis. 3 lecture hours and 3 lab hours per week. Prerequisite: CHEM-2319

## CHEM-4242 Advanced Analytical Methods

Principles of modern instrumental analysis, with emphasis on separation methods and mass spectrometry. Both

theory and practical experience are addressed. Appropriate laboratory experience emphasizes use of sophisticated chemical instrumentation. Equivalent of 1 lecture hour and 3 laboratory hours per week. Prerequisite: CHEM 3432. CHEM 3334 is recommended.

### CHEM-4250 Senior Integrated Laboratory

Advanced experimentation in chemistry and biochemistry. A team-taught course designed to bring the perspectives of multiple disciplines to bear on advanced laboratory problems. The emphasis in the course will be on the use of emission and absorption spectroscopy, magnetic resonance, electrochemistry, and computational chemistry to study complex chemical and biochemical problems. Equivalent of 1 lecture hour and 6 laboratory hours per week. (offered every Fall). Prerequisites: CHEM 3334, 3335, 3135.

### CHEM-4340 Biochemistry II

The continuation of CHEM 3330 with emphasis on metabolism, biosynthesis, and gene expression. Lecture, 3 hours per week. Prerequisites: CHEM 3330, 3334.

### CHEM-4346 Advanced Interdisciplinary Topics-Fall

Advanced topics in chemistry, with an emphasis on modern approaches in interdisciplinary areas. Topics will vary from semester to semester and may include physical inorganic, physical organic, bioinorganic, bioorganic, organometallic chemistry or the chemistry of materials. Lecture, 3 hours per week. Pre- or Corequisite: CHEM 3334.

### CHEM-4347 Advanced Interdisciplinary Topics-Spring

Advanced topics in chemistry, with an emphasis on modern approaches in interdisciplinary areas. Topics will vary from semester to semester and may include physical inorganic, physical organic, bioinorganic, bioorganic, bioanalytical, organometallic chemistry, or the chemistry of materials. Lecture, 3 hours per week, Spring. Prerequisite: CHEM 3334.

### CHEM-4395 Thesis Research in Chemistry and Biochemistry

Written communication of research performed at Trinity University in thesis form. Course enrollment requires a minimum of two semesters of research involvement in a research project and the permission of the department chair.

### CHEM-4399 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors students in both terms of their Senior year. Includes participation in Senior Colloquium where students present reports on their Thesis work.

# Classical Studies

## Faculty

[Timothy O'Sullivan, Ph.D.](#) , Professor; Chair

[Erwin Cook, Ph.D.](#) , T. Frank Murchison Distinguished Professor of Classical Studies

[Nicolle Elise Hirschfeld, Ph.D.](#) , Professor

[Thomas E. Jenkins, Ph.D.](#) , Professor; Director of the Collaborative for Learning and Teaching

[Lawrence Kim, Ph.D.](#) , Professor

[Corinne Ondine Pache, Ph.D.](#) , Professor

## Overview

The Department of Classical Studies encompasses the study of all aspects of the Ancient Mediterranean world. The program is highly interdisciplinary in nature, bringing together the fields of history, literature, religion, philosophy, human communication and theatre, art history, archaeology, anthropology, political science, and so forth. The Department offers four majors: Ancient Mediterranean Studies, Greek, Latin, and Classical Languages. Ancient Mediterranean Studies is a major in ancient culture and does not require a language, although language courses do count toward this degree. Courses offered through the Departments of Art and Art History, History, Human Communication and Theatre, Philosophy, Political Science, Religion, and Sociology and Anthropology form part of the program of the Department of Classical Studies. The program offers an excellent focus for a liberal arts education and combines well with majors in other fields in both the humanities and sciences.

Students interested in graduate work in Classical Studies or related fields should be advised early on that a knowledge of both languages is essential for work in a good graduate school. The requirements for the major are only a minimum, and students preparing for graduate study should start language courses as soon as possible. Note that courses credited towards the major in one field (Ancient Mediterranean Studies, Greek, Latin, or Classical Languages) may also be credited toward a minor in another but may not be credited towards a second major in the Department.

## Requirements

- [Bachelor of Arts with a major in Ancient Mediterranean Studies](#)
- [Bachelor of Arts with a major in Greek](#)
- [Bachelor of Arts with a major in Latin](#)
- [Bachelor of Arts with a major in Classical Languages](#)
- [The Minor](#)
- [The Honors Program](#)

- [Language Skills](#)
- [Classics Courses in English](#)

## Ancient Mediterranean Studies

**Requirements for a Bachelor of Arts with a major in Ancient Mediterranean Studies are as follows:**

- I. Departmental requirements: 30 hours of courses chosen from those listed below under Classics Courses in English, Greek, or Latin, including 18 upper division hours. At least 12 hours must be CLAS hours. This major does not require a language, although language courses do count for this degree. Greek and Latin courses credited towards the Ancient Mediterranean Studies major may also be credited towards the minor in Greek or Latin.
  
  - II. University requirements: completion of all other required elements of the Pathways curriculum and at least 124 credit hours.
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## Greek

**Requirements for a Bachelor of Arts with a major in Greek are as follows:**

- I. Departmental requirements:
    - A. Completion of the elementary and intermediate sequence of courses (12 hours) or the equivalent in Greek.
  
    - B. 27 additional hours of courses chosen from those listed below under Classics Courses in English, Greek, or Latin, including 12 upper division hours of Greek. (Courses in Latin credited towards the Greek major may also be credited towards the minor in Latin.)
  
  - II. University requirements: completion of all other required elements of the Pathways curriculum and at least 124 credit hours.
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# Latin

**Requirements for a Bachelor of Arts with a major in Latin are as follows:**

I. Departmental requirements:

A. Completion of the elementary and intermediate sequence of courses (13 hours) or the equivalent in Latin.

B. 26 additional hours of courses chosen from those listed below under Classics Courses in English, Greek, or Latin, including 12 upper division hours of Latin. (Courses in Greek credited towards the Latin major may also be credited towards the minor in Greek.)

II. University requirements: completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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# Classical Languages

**Requirements for a Bachelor of Arts with a major in Classical Languages are as follows:**

I. Departmental requirements:

A. Completion of the elementary and intermediate sequence of courses (25 hours) or the equivalent in both Greek and Latin.

B. 22 hours of courses chosen from those listed below under Classics Courses in English, Greek, or Latin, including 15 upper division hours of either Greek or Latin, with at least 6 hours of each.

II. University requirements: completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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# The Minor

Classical Studies at Trinity is highly interdisciplinary in nature, bringing together the fields of history, literature, religion, philosophy, speech and drama, art history, archaeology, anthropology, political science, and so forth. The Department of Classical Studies offers three minors: Ancient Mediterranean Studies, Greek, and Latin. Ancient Mediterranean Studies is a minor in ancient culture and does not require a language, although language courses do

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count toward this degree. In addition to the University's regulations for minors, students should complete the following Departmental requirements.

### **Ancient Mediterranean Studies**

Completion of at least 18 hours of courses chosen from those listed below under Classics Courses in English, Greek, or Latin, of which at least 9 hours must be in the upper division. At least 6 hours must be CLAS hours. Ancient Mediterranean Studies is a minor in ancient culture and does not require a language, although language courses do count toward this degree. No more than 3 hours may overlap with the student's major. A minimum of 12 hours toward the minor must be completed at Trinity.

### **Greek**

Completion of at least 18 hours in Greek, of which at least 6 must be in the upper division. A minimum of 12 hours toward the minor must be completed at Trinity.

### **Latin**

Completion of at least 18 hours in Latin, of which at least 6 must be in the upper division. A minimum of 12 hours toward the minor must be completed at Trinity.

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## The Honors Program

### I. University requirements

### II. Departmental requirements:

The Department of Classical Studies offers an Honors Program in Classics. The requirements for Honors in Classical Studies are the same as the University requirements. For further information, please consult the chair of the department as early as possible in the first semester of the junior year.

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## Language Skills

All courses under the heading Classics Courses in English are taught through the medium of English translation and no knowledge of Greek or Latin is required. Courses under the headings Greek and Latin are directed to the acquisition of those languages, respectively.

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# Classics Courses in English

The following courses from other departments are accepted as Classics Courses in English.

ANTH 1304	Introduction to Classical Archaeology
ANTH 1309	Pirates, Merchants, and Marines: Seafaring in the Ancient Mediterranean
ANTH 4-72	Archaeological Practicum
ARTH 1407	Art History I: Prehistoric through Medieval Art
ARTH 1413	Art and Archaeology of Ancient Egypt
ARTH 2428	Art and Archaeology of Mesopotamia and Persia
ARTH 3320	The Minoan-Mycenean Civilization
ARTH 3321	Greek Vase Painting
ARTH 3322	Greek Architecture
ARTH 3325	Roman Art and Architecture
ARTH 3330	Art and Architecture in the Late Classical World
ARTH 3391	Topics in Art History (where appropriate)
ARTH 4395	Seminar in Art History (where appropriate)
HIST 1310	Ancient Greece and Rome
HIST 1311	Gender and Identity in the Ancient World
HIST 1312	Greeks, Romans, and Barbarians
HIST 3310	Archaic and Classical Greece
HIST 3314	The Mediterranean World in the Hellenistic Age
HIST 3318	The Roman Empire
HIST 3-92	Special Topics in History (where appropriate)
HCOM 2350	Classical Rhetorical Theory
ITAL 3371	Introduction to Romance Linguistics
FREN 3371	Introduction to Romance Linguistics
PHIL 3410	Classical Greek Philosophy
PHIL 3411	Hellenistic Philosophy
PHIL 3361	Theorizing Myth

PLSI 3361	Classical Political Thought
RELI 3338	Greek Religious Experience
RELI 3353	The Gospels, Jesus, and Christian Origins
RELI 3454	The Letters of Paul
RELI 3455	Early Christian Literature Beyond the Canon
SPAN 3371	Introduction to Romance Linguistics
THTR 3335	Greek and Roman Drama

## Courses

### Classical Courses in English - Lower Division

#### CLAS-1301 Topics in Classical Studies

Study of topics related to the ancient Mediterranean world and its legacy, such as Latin and Greek elements in the English language, classical civilization, etc. May be taken more than once, provided that topics vary.

#### CLAS-1302 Literary Classics of Ancient Greek World

A study of certain major works of ancient Greek literature in their entirety, and a survey of the major Greek authors and of their contribution to European literature. All works will be read in English translation.

#### CLAS-1303 Literary Classics of the Roman World

A study of certain major works of Latin literature in their entirety, and a survey of the major Latin authors and of their contribution to European literature. All works will be read in English translation.

#### CLAS-1304 Introduction to Classical Archaeology

An introduction to the history of archaeological activity in the Mediterranean, and archaeological theory and field techniques. Course will also examine major sites and monuments of ancient Greece and Rome. (Also listed as ANTH 1304.)

#### CLAS-1305 Classical Mythology



An introductory survey of the major myths of the classical world, drawing on evidence from ancient literature and art. Course may also explore modern theoretical approaches (anthropological, historical, political, linguistic, feminist, psychological, etc.) to the study of myth in general, and how these modern theories have been applied to classical myth.

### CLAS-1307 Gender and Identity in the Ancient World

An examination of the roles of women and men in the society, religion, and culture of the ancient world. Readings will include historical, religious, medical, legal, philosophical, and literary texts. Representations of men and women in the visual arts will also be considered. (Also listed as HIST 1311.)

### CLAS-1308 Daily Life in Ancient Rome

An introduction to the Roman world by way of the daily life of its inhabitants, with a focus on the urban experience. Evidence will include literary texts, inscriptions, epitaphs, graffiti, painting, sculpture, wills, letters, and the art and architecture of domestic space.

### CLAS-1309 Pirates, Merchants, and Marines: Seafaring in the Ancient Mediterranean

This course explores how human relations with the sea affected the social, economic, military, political, and technological aspects of life in the ancient Mediterranean littoral. Evidence includes hulls and cargoes of shipwrecks, harborworks, inscriptions, graffiti, wall painting and mosaics, literary texts, and gravestones. A central focus will be an introduction to the methodology and technologies of archaeology, but the subject matter of this course and the nature of the discipline of maritime archaeology incorporate methodologies and substance also from the fields of Anthropology, Ethnography, Physical Sciences, Engineering, Art History, History, and Geography. (Also listed as ANTH 1309.)

### CLAS-1310 Daily Life in Ancient Greece

An introduction to the ancient Greek world by way of the daily life of its inhabitants, with a focus on the urban experience. Evidence will include literary texts, inscriptions, epitaphs, painting, sculpture, and the art and architecture of domestic public space.

### CLAS-1312 Greeks, Romans, and Barbarians

This course gives students an opportunity to examine the cultures and achievements of peoples labeled "barbarians" by the ancient Greeks and Romans. Students will use a broad selection of historical documents originating from the Near East, Egypt, Greece and Rome, as well as the results of archaeological research, for investigating the social structures and values of these cultures. Critical methods for interpreting ancient and modern evidence about these societies will also be discussed. (Also listed as HIST 1312.)

## CLAS-1314 The Art of Losing: Death in Literature

This course examines the literature and art developed in answer to the loss of human life in ancient Greece, Japan, and modern Western culture. Themes will include: heroic deaths, the Underworld, facing death, love and death, ghosts and the undead, mourning and remembering. (Offered every other year).

## CLAS-1315 Afterlives of Antiquity: Underworlds in The Western Tradition

In this course we trace an important, recurrent theme in the Western tradition, in which journey into the underworld, or katabasis, is closely linked to the encounters with the dead, or nekyliai. Each variation on that theme represents a way of asking, How might we respond to the fact of mortality, of death, in the immortal fictions of literature and art? Centering our study around the influential depiction of the underworld in Virgil's great epic, the Aeneid, we consider a wide range of authors and texts. (Offered every other year).

## CLAS-1317 Classical Traditions in Science Fiction

In this course we explore how science fiction (SF), the genre perhaps most characteristic of the modern world, draws on and departs from ancient Greek and Roman literature, philosophy, myth, history, and art: in other words, how SF forms part of 'classical traditions' and constitutes a rich site for 'classical receptions,' both transmitting and transmuting ancient materials. Beginning with Mary Shelley's *Frankenstein* (1818), evoking antiquity in its subtitle, *The Modern Prometheus*, we consider a wide range of materials—mainly literature and film—from several theoretical perspectives in the fields of SF studies and Classics. Readings from modern authors including Kafka, Borges, Herbert, Le Guin, and Dick; ancient authors including Homer, Aeschylus, Lucretius, Ovid, and Lucian; and screenings from directors including Wilcox, Tarkovsky, Kubrick, Cronenberg, and Scott. (Also listed as CMLT 1317.)

## CLAS-1318 Ancient Athletics: From Olympians to Gladiators

This course examines the sports and spectacles of ancient Greece and Rome through the close study of archaeological, artistic, and literary evidence relating to athletes, competitions, and festivals—e.g., ancient training facilities and performance spaces, statues, mosaics, coins, graffiti, inscriptions, and literary texts. The goal is a deeper understanding of the cultural values and practices associated with athletics in antiquity (including the differences between Greece and Rome) as well as of the general relationship between sports and their historical circumstances. Comparison of ancient and modern athletic practices and ideologies will be a regular feature of discussions and assignments. (Once every four semesters).

## CLAS-2406 Technology and the Classical World

Surveys the technological achievements of the Greek and Roman civilizations, and how and why ancient attitudes differed from ours today. This course is intended to accomplish three objectives: (1) To expose participants to the breadth of this topic: the range of ancient Greek and Roman technologies, the varieties of evidence (ancient, comparative, scientific/analytic), and the different methodologies of modern inquiry. (2) That participants explore a specific topic in depth, and (3) That participants develop an effective oral and visual presentation of what they

discover in the course of their explorations.

## Classical Courses in English - Upper Division

### CLAS-3301 Advanced Topics in Classical Studies

Advanced study of topics related to the ancient Mediterranean world and its legacy, such as Neronian culture, ancient scripts, Hellenistic and Greek Imperial literature, the Byzantine world. May be taken more than once, provided that topics vary. Prerequisite: Sophomore standing or consent of instructor.

### CLAS-3302 Greek and Roman Epic

A study of such epics as Homer's Iliad and Odyssey and Virgil's Aeneid, read in English, with attention to changes in concepts of heroism and the self. Discussions will also focus on how the epics reflect cultural and political life. Prerequisite: Sophomore standing or consent of instructor.

### CLAS-3403 Greek and Roman Drama

A study of Greek and Roman tragedies and comedies, read in English, with attention to how the plays reflect contemporary and enduring social, theatrical, and political concerns. Students will also produce, adapt, direct, and/or act in a performance of Greek or Roman drama. Prerequisite: sophomore standing or consent of instructor.

### CLAS-3404 The Ancient Novel

A study of ancient prose fiction, which focuses largely on love and adventure. Discussions emphasize social, religious, and aesthetic issues raised by individual works, and special attention is paid to the ancient romance's relation to the medieval romance and the modern novel. (Offered every other year). Prerequisite: Sophomore standing or consent of instructor.

### CLAS-3405 Antiquity and Modernity

Antiquity and Modernity explores the ways in which the ancient world is constructed through the lenses of modern art, literature, and scholarship, focusing especially on contemporary media. Topics to be covered include the influence of classical texts on modern constructions of sexuality; the links between the avant-garde of both the ancient world and the modern; the political uses and abuses of antiquity; and the production of 'camp.' The course also serves as an introduction to reception theory, a subfield of cultural criticism. All readings are in translation. Prerequisite: Sophomore standing or consent of instructor

### CLAS-3306 Ancient Cyprus

A survey of the material, political and cultural histories of Cyprus, from the arrival of the first human inhabitants (10th millennium BCE) through the rule of the Roman emperors (4th century CE), with a special emphasis on themes of diversity, assimilation and identity. The early history of the island will be considered primarily through the archaeological discoveries, which, prior to the availability of written records, are our only source of information. The later history will draw on other sources, such as historical and literary texts, inscriptions, sculpture, mosaics, and monuments. Prerequisites: Sophomore standing or consent of instructor.

### CLAS-3407 The Homeric Iliad

The Homeric Iliad provides an intensive examination of a fundamental text of antiquity, including its historical, archaeological, and anthropological contexts. All readings are in English translation. Prerequisite: Sophomore standing or Consent of Instructor.

### CLAS-3408 The Homeric Odyssey

The Homeric Odyssey provides an intensive examination of a fundamental text of antiquity, including its historical, archaeological, and anthropological contexts. All readings are in English translation. Prerequisite: Sophomore standing or consent of Instructor.

### CLAS-3409 Epic Journeys

A comparative study of epic traditions in literature and film. In the first half of the course, we focus on traditional epics, such as Gilgamesh, Homer's Odyssey, the Intuit tradition of the Fast Runner, and the Korean song tradition of Chunhyang, focusing especially on themes such as the heroic journey, exile and homecoming. In the second half of the course, we examine the reception of traditional epic in the modern Western literacy tradition and films. (Also listed as CMLT 3309.) Prerequisite: Sophomore standing or consent of instructor. Common Curriculum: This course will count towards either Visual Arts, Music, Performance, and Aesthetic Production or Literary Studies.

### CLAS-3310 Antiquity and Diversity in Contemporary Literature

In this seminar, we explore how contemporary American literature articulates issues in diversity and identity via themes, stories, and images drawn from classical (Greek and Roman) antiquity. Far from being 'dead letters' belonging solely to 'dead white men,' the classics are important sources of inspiration and creativity—as well as controversy and debate—for authors representing diverse American identities today, including African-American, Latinx, LGBTQ, Native American, religious minorities, regional identities, and more. To consider diversity in such categories as race and ethnicity, social class, gender and sexuality, immigration, regional identity, and religion, we focus on American literature since World War II, in connection with the most relevant ancient sources, in comparison with films, and in contexts of scholarship and criticism. (Offered every other year.) Prerequisite: Sophomore standing or consent of instructor; coursework in, or demonstrated knowledge of, classical or contemporary literature and relevant scholarly methods desirable but not required.

### CLAS-3319 The World of Late Antiquity

A study of the political, cultural, and religious life of the Roman Empire from the second to the fifth centuries CE—a vital transitional period between the classical and medieval worlds. Beginning with the "golden age" of the Antonine emperors, this course examines the military and political "crisis" of the third century, the Christianization of the empire in the fourth, and the religious and cultural conflicts that accompanied the fragmentation of power in the fifth. (Also listed as HIST 3319.) Prerequisite: Sophomore standing or Consent of Instructor

### CLAS-3338 Greek Religious Experience

A study of Greek religious festivals designed to produce a coherent image of a year in the religious life of the ancient Greeks. Through a combination of archaeological and literary evidence, we will attempt to reconstruct the rituals performed at the various festivals and explore the ways in which they organized and articulated the community through shared religious experience. We shall also consider the ways in which religion organized civic space and gave it meaning. (Also listed as RELI 3338). Prerequisite: Sophomore standing or consent of instructor

### CLAS-3350 Theorizing Myth

A survey of theoretical approaches to myth from the eighteenth century to the present. This survey begins with the transition from renaissance belief that myth is a form of moral instruction conveyed by allegory to the romantic belief that myth is a symbolic mode of discourse offering insight into transcendental reality. We will then chart the evolution of this approach, beginning with its inspiration in Kantian metaphysics and early formulations by German romantics such as Schiller and proceeding on to Freud and Ricoeur. A second strand begins with Hegel's theories of "false consciousness" that would in time develop into interpretations of myth as ideology, under the influence of Marx, Adorno, and Althusser. A final strand begins with the earlier folklorists, the brothers Grimm, and would in time develop into functionalist approaches to myth by anthropologists such as Malinowski, Boas, and Levi-Strauss. The resulting big picture is as much an intellectual history of modernity as a history of theorizing myth. (Also listed as PHIL 3361) Prerequisites: Sophomore standing or consent of instructor.

### CLAS-3371 Introduction to Romance Linguistics

A study of the science of language as it applies to those tongues having their origin in spoken Latin, principally French, Italian, Portuguese, Rumanian, and Spanish. Attention will be given both to historical developments and to the current situations of such languages. (Same as FREN 3371, ITAL 3371, and SPAN 3371). Prerequisite: two years or the equivalent of Latin, ancient Greek, or a Romance language.

### CLAS-3-72 Archaeological Practicum

Participation in an approved excavation in the Mediterranean world, Western Europe, or the Near East. Students will be expected to receive instruction in excavation techniques and in the recording and study of the site and the material. Two weeks' work will normally be counted as equivalent to 1 credit, up to a maximum of 3 credits. (Also listed as ANTH 3172.) (Offered occasionally.) Prerequisites: Approval of the department chair and of the excavation director.

### CLAS-3-90 Directed Studies

Individual work under supervisor in areas not covered by other courses. May be taken more than once as content varies. Prerequisite: Consent of the Department Chair.

### CLAS-3398 Honors Readings

Independent study in selected areas in preparation for Honors Thesis. Prerequisite: Admission to Honors Program.

### CLAS-4302 Advanced Seminar in Classical Studies

A seminar on selected special topics in Classical Studies. May be taken more than once, as topics vary. Prerequisite: Classical Studies major with senior standing.

### CLAS-4-72 Archaeological Practicum II

Students who have already taken CLAS 3-72 may obtain credit for one further season of work on the same conditions as for 3-72. (Also listed as ANTH 4-72.) (Offered occasionally.) Prerequisites: CLAS 3-72 and approval of the department and of the excavation director.

### CLAS-4-90 Directed Studies

Individual work under supervisor in areas not covered by other courses. May be taken more than once, as content varies. Prerequisite: Consent of the department chair.

### CLAS-4-91 Selected Topics

Special study in fields not covered by other courses. Variations in credit according to work performed, from 1-6 hours. May be taken more than once as content varies. Prerequisite: Consent of the department chair.

### CLAS-4398 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by senior Honors students in both semesters of their senior year.

### CLAS-4399 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by senior Honors students in both semesters of their senior year.

### CLAS-3377 Reimagining Tragedy

This course explores the historical evolution and interpretation of classical and contemporary tragedy with a special emphasis on creativity as an interpretative tool. This course will feature performance, adaptation, and design as an integral part of the analysis and discussion of the dramatic texts. Texts and authors to be covered include Euripides, Sophocles, Seneca, Shakespeare, Anouilh, and O'Neill. (Also listed as THTR 3377.) (Offered every other year.)

### CLAS-4397 Museum Internship

Participation in a program of study to be determined by the Department and the Curator of the Ancient Art collection at the San Antonio Museum of Art. The program will focus on conservation, museum administration, original research on holdings in the San Antonio Museum of Art, and object display. Each internship must be directed by a faculty member who will draw up an agreement between the sponsoring institution, the student, and the Department outlining the scope and requirements of the course. One to 3 hours per semester, maximum 6 semester hours. Elective only. Pass/Fail only. Prerequisite: Approval of the department chair.

## Greek - Lower Division

### GREK-1301 Elementary Classical Greek I

3 class hours a week for 1 semester. Spring

### GREK-1302 Elementary Classical Greek II

3 class hours a week for 1 semester. Fall. Prerequisite: GREK 1301 or the equivalent.

### GREK-2301 Intermediate Classical Greek

3 class hours a week for 1 semester. Spring Prerequisite: GREK 1302 or the equivalent.

### GREK-2402 Readings in Classical Greek Literature

Selections from Greek authors; emphasis on developing reading skills. Fall. Prerequisite: GREK 2301 or the equivalent.

### GREK-2303 Readings in the New Testament

Selections from the Greek New Testament. Emphasis on developing reading skills in Biblical Greek. Fall, as required. Prerequisite: GREK 2301 or the equivalent. May either substitute for or be taken in addition to GREK 2302.

## Greek - Upper Division

### GREK-3401 Homer and Greek Epic

Selections from the Iliad and Odyssey. May also include other epic poets. Prerequisite: GREK 2302, 2303, or the equivalent.

### GREK-3402 Attic Prose

Readings in Attic prose writers, especially Plato, Xenophon, and the orators. Prerequisite: GREK 2302, 2303, or the equivalent

### GREK-3403 Greek Drama

Readings from Greek drama. Prerequisite: GREK 2302, 2303, or the equivalent.

### GREK-3404 Greek Historians

Readings in Greek historians, especially Herodotus and Thucydides. Prerequisite: GREK 2302, 2303, or the equivalent.

### GREK-3405 Greek Lyric

A survey of Greek lyric texts in both their historical and literary contexts. Authors to be considered include Sappho, Theocritus, Theognis, and Pindar. Prerequisite: GREK 2302, 2303, or the equivalent.

### GREK-3-90 Directed Studies

Individual work under supervisor in areas not covered by other courses. May be taken more than once, as content varies. Prerequisites: GREK 2302, 2303, or the equivalent, and consent of the department chair.

### GREK-4-90 Directed Studies

Individual work under supervisor in areas not covered by other courses. May be taken more than once, as content varies. Prerequisites: GREK 2302, 2303, or the equivalent, and consent of the department chair.

### GREK-4-91 Selected Topics

Special study in fields not covered by other courses. Variation in credit according to work performed, from 1-6 hours. May be taken more than once, as content varies. Prerequisites: GREK 2302, 2303, or the equivalent, and



consent of the department chair.

## Latin - Lower Division

### LATN-1401 Elementary Latin I

3 class hours a week for 1 semester.

### LATN-1402 Elementary Latin II

3 class hours a week for 1 semester. Spring. Prerequisite: LATN 1401 or the equivalent.

### LATN-2301 Intermediate Latin I

3 class hours a week for 1 semester. Fall Prerequisite: LATN 1302 or the equivalent.

### LATN-2302 Intermediate Latin II

Selections from Latin authors; emphasis on developing reading skills. (Offered every Spring.) Prerequisite: LATN 2301 or the equivalent.

## Latin - Upper Division

### LATN-3301 Latin Prose Composition

Drill in Latin grammar through the writing of Latin. Comparison of rhetorical devices of Latin with similar usages in English. Prerequisite: LATN 2302 or the equivalent.

### LATN-3402 Virgil and Latin Epic

Selected readings from the Eclogues, the Georgics, and/or the Aeneid together with consideration of Virgil's sources and his impact upon the pastoral, didactic and epic. May also include other epic poets. Prerequisite: LATN 2302 or the equivalent.

### LATN-3403 Latin Prose to 43 B.C.

Study of prose writers of the Late Republic, such as Caesar, Cicero, Nepos, or Sallust. Prerequisite: LATN 2302 or the equivalent.

### LATN-3404 Lyric & Elegiac Poets

Selections in lyric and elegiac poetry, from authors such as Catullus, Horace, Ovid, Propertius or Tibullus.  
Prerequisite: LATN 2302 or the equivalent.

### LATN-3405 Latin Prose from 43 BC

Study of prose writers from the Augustan Age onwards, such as Livy, Pliny, Tacitus, or early Christian writers.  
Prerequisite: LATN 2302 or the equivalent.

### LATN-3406 Comedy & Satire

Selections in comedy and in satire, from authors such as Plautus, Terence, Horace, Juvenal, Martial or Petronius.  
Prerequisite: LATN 2302 or the equivalent.

### LATN-3407 Imperial Roman Literature

A study of Imperial Roman Literature in its social and historical contexts, with a special emphasis on post-Augustan texts. Prerequisite: LATN 2302 or the equivalent

### LATN-3408 Ovid

An intensive study of the poetry of Ovid, with a particular emphasis on the poet's engagement with Augustan ideology. Texts may include a variety of genres, including epic, elegy, exile poetry, and epistolary fiction.  
Prerequisite: LATN 2302 or the equivalent

### LATN-3409 The Roman Novel

An intensive investigation of Petronius' *Satyricon* and Apuleius' *The Golden Ass*, with special attention paid to issues of genre, religion, gender, and influence. Prerequisite: LATN 2302 or the equivalent

### LATN-3-90 Directed Studies

Individual work under supervisor in areas not covered by other courses. May be repeated more than once, as content varies. Prerequisites: LATN 2402 or the equivalent, and consent of the department chair.

### LATN-4-90 Directed Studies

Individual work under supervisor in areas not covered by other courses. May be taken more than once, as content varies. Prerequisites: LATN 2302 or the equivalent, and consent of the department chair.

## LATN-4-91 Selected Topics

Special study in fields not covered by other courses. Variations in credit according to work performed, from 1-6 hours. May be taken more than once, as content varies. Prerequisites: LATN 2302 or the equivalent, and consent of the department chair.

# Comparative Literature

## Faculty

[Erwin Cook, Ph.D.](#) , T. Frank Murchison Distinguished Professor of Classical Studies

[Ruben R. Dupertuis, Ph.D.](#) , Associate Professor, Religion

[Stephen Lee Field, Ph.D.](#) , J. K. and Ingrid Lee Endowed Professor of Chinese Language and Literature, Modern Languages and Literatures

[Jinli He, Ph.D.](#) , Associate Professor, Modern Languages and Literatures

[Thomas E. Jenkins, Ph.D.](#) , Professor, Classical Studies

[Timothy O'Sullivan, Ph.D.](#) , Professor, Classical Studies

[Corinne Ondine Pache, Ph.D.](#) , Professor, Classical Studies

[Michael Soto, Ph.D.](#) , Professor, English

[Heather Sullivan, Ph.D.](#) , Professor, Modern Languages and Literatures; Director

[Michael Ward, Ph.D.](#) , Associate Professor, Modern Languages and Literatures

## Overview

Comparative Literature is an interdisciplinary program designed for students who want to pursue the study of literature unrestricted by national boundaries and conventional demarcations of culture. Comparative Literature recognizes that all literary texts exist within the framework of world cultures and emphasizes the importance of bringing a multicultural perspective to the understanding of literary traditions. It includes reading literature in the original language as well as in translation.

Completion of this program will be indicated on the student's transcript with the notation "Minor in Comparative Literature."

Students interested in a Comparative Literature minor should contact the Chair of the Committee, who will assign a faculty adviser to the student.

Students considering going on to graduate work in comparative literature are strongly encouraged to start studying one or more foreign languages (classical and/or modern) as soon as possible and to continue throughout their undergraduate career.

## Requirements

# The Minor

The requirements for a minor in Comparative Literature are as follows:

- I. **Two courses from each of the three categories below (A, B, and C), for a total of six courses.**
- II. **At least three of the total shall be upper division courses.**

No more than two of the total may overlap with the student's primary major. These courses shall be chosen as follows:

**A. Two courses in the literature of a language other than English.** All materials in these courses must be in the original language. These courses include the following:

**In the Department of Classical Studies:**

GREK 2302	Readings in Classical Greek Literature
GREK 2303	Readings in the New Testament
GREK 3301	Homer and the Greek Epic
GREK 3302	Attic Prose
GREK 3303	Greek Drama
GREK 3304	Greek Historians
LATN 3302	Virgil and Latin Epic
LATN 3303	Latin Prose to 43 B.C.
LATN 3304	Lyric and Elegiac Poets
LATN 3305	Latin Prose from 43 B.C.
LATN 3306	Comedy and Satire

**In the Department of Modern Languages and Literatures:**

CHIN 3312	Chinese Cinema: A Historical and Cultural Perspective
CHIN 4321	Readings in Modern Chinese Literature
CHIN 4351	Classical Chinese
FREN 3305	Introduction to French Literature I
FREN 3306	Introduction to French Literature II
FREN 4303	Topics in French Literature of the Seventeenth Century

FREN 4304	Topics in French Literature of the Eighteenth Century
FREN 4305	Topics in French Literature of the Nineteenth Century
FREN 4306	Topics in French Literature of the Twentieth Century
FREN 4307	French Cinema
GERM 3305	Introduction to German Literature I
GERM 3306	Introduction to German Literature II
GERM 4301	Genre Studies in German Literature
GERM 4310	Seminar in German Literature
RUSS 3305	Introduction to Russian Literature I
RUSS 3306	Introduction to Russian Literature II
RUSS 4301	Genre Studies in Russian Literature
RUSS 4310	Seminar in Russian Literature
SPAN 3321	Spanish Cinema
SPAN 3322	Spanish American Cinema
SPAN 3331	Introduction to Spanish Literature since 1700
SPAN 3332	Introduction to Spanish American Literature
SPAN 4331	Medieval Spanish Literature
SPAN 4332	Spanish Golden Age Literature
SPAN 4333	Don Quixote
SPAN 4334	Nineteenth-Century Spanish Literature
SPAN 4335	Hispanic Modernism
SPAN 4336	Twentieth-Century Spanish Literature
SPAN 4338	Spanish Women Writers
SPAN 4342	Spanish American Literature before Modernism
SPAN 4343	Twentieth-Century Spanish American Poetry
SPAN 4344	Twentieth-Century Spanish American Novel
SPAN 4345	Twentieth-Century Spanish American Short Story
SPAN 4346	Twentieth-Century Spanish American Drama
SPAN 4347	National and Regional Literatures of Spanish America

SPAN 4348 Spanish American Women Writers

SPAN 4349 Sexualities in Literature and Film

**B. Two literature courses in a language other than that chosen for A.**

These may include courses listed above for A, literature and film courses in translation offered in the Department of Classical Studies and in the Department of Modern Languages and Literatures, German Studies courses listed as “GRST,” courses in American or British literature offered in the Department of English, and the course in American drama offered in the Department of Human Communication and Theatre. These may also include the following courses offered in the Department of Religion: RELI 3351 – Narratives in the Hebrew Bible, and RELI 3352 - Poetry in the Hebrew Bible.

**C. CMLT 1300, and one additional course to be chosen from the following list of courses with strong comparative components.**

ARTH 2301 International Cinema (also listed as COMM 2301, FILM 2301, and ML&L 2301)

CLAS 1305 Classical Mythology

CLAS 1307 Gender and Identity in the Ancient World

CLAS 1314 The Art of Losing

CLAS 1315 Underworlds

CLAS 3302 Greek and Roman Epic

CLAS 3310 Antiquity and Identity in Contemporary Literature

CLAS 3377 Reimagining Tragedy (also listed as THTR 3377)

CLAS 3403 Greek and Roman Drama (also listed as THTR 3335)

CLAS 3404 The Ancient Romance and Novel

CLAS 3405 Antiquity and Modernity

CLAS 3409 Epic Journeys

COMM 2301 International Cinema (also listed as ARTH 2301, FILM 2301, and ML&L 2301)

CMLT 1300 Introduction to Comparative Literature (REQUIRED)

CMLT 2350 Science Fiction and the Environment

CMLT 3409 Epic Journeys (also listed as CLAS 3409)

ENGL 2305 World Literature

ENGL 3429 Jewish Literature

ENGL 3359	Medieval Literature
ENGL 3375	Postmodern Literature
ENGL 3385	The Continental Novel
ENGL 4427	Literature of the Holocaust
FILM 2301	International Cinema (also listed as ARTH 2301, COMM 2301, and ML&L 2301)
GRST 3311	Fairy Tales
ML&L 2301	International Cinema (also listed as ARTH 2301, COMM 2301, and FILM 2301)
PHIL 2425	Existentialism
PHIL 3460	Philosophy of Literature
PLSI 1332	Film, Literature, and Politics of the Third World
THTR 3335	Greek and Roman Drama
THTR 3336	Modern Drama
THTR 3337	Contemporary Drama
THTR 3377	Reimagining Tragedy (also listed as CLAS 3377)

## Courses

### CMLT-1300 Introduction to Comparative Literature

Examines with a cross-cultural perspective texts from around the world. The course provides an introduction to the interdisciplinary field of comparative literatures.

### CMLT-1317 Classical Traditions in Science Fiction

In this course we explore how science fiction (SF), the genre perhaps most characteristic of the modern world, draws on and departs from ancient Greek and Roman literature, philosophy, myth, history, and art: in other words, how SF forms part of 'classical traditions' and constitutes a rich site for 'classical receptions,' both transmitting and transmuting ancient materials. Beginning with Mary Shelley's *Frankenstein* (1818), evoking antiquity in its subtitle, *The Modern Prometheus*, we consider a wide range of materials—mainly literature and film—from several theoretical perspectives in the fields of SF studies and Classics. Readings from modern authors including Kafka, Borges, Herbert, Le Guin, and Dick; ancient authors including Homer, Aeschylus, Lucretius, Ovid, and Lucian; and screenings from directors including Wilcox, Tarkovsky, Kubrick, Cronenberg, and Scott. (Also listed as CMLT 1317.)



## CMLT-2301 World Literature and the Environment

This course examines literary texts from around the world with an emphasis on environmental issues and a global perspective. The emphasis on literary and cultural perspectives develops similar themes to those explored through a scientific lens in its partner course, BIOL 2305. Corequisite: BIOL 2305.

## CMLT-2350 Science Fiction and the Environment

An introduction to science fiction with an emphasis on the literary exploration of environmental issues.

## CMLT-3409 Epic Journeys

A comparative study of epic traditions in literature and film. In the first half of the course, we focus on traditional epics, such as Gilgamesh, Homer's *Odyssey*, the Intuit tradition of the *Fast Runner*, and the Korean song tradition of *Chunhyang*, focusing especially on themes such as the heroic journey, exile and homecoming. In the second half of the course, we examine the reception of traditional epic in the modern Western literacy tradition and films. (Also listed as CLAS 3309.) Prerequisite: Sophomore standing or consent of instructor. Common Curriculum: This course will count towards either Visual Arts, Music, Performance, and Aesthetic Production or Literary Studies.

## CMLT-3-90 Reading and Conference

Individual work under faculty supervision not covered by other courses. May be repeated up to six hours. Prerequisites: Completion of CMLT 1300 and approval of program chair.

# Communication

## Faculty

[William G. Christ, Ph.D.](#) , Professor

[Aaron Delwiche, Ph.D.](#) , Professor

[Sarah E. Erickson, Ph.D.](#) , Assistant Professor

[Jennifer Jacobs Henderson, Ph.D.](#) , Professor; Chair

[Robert Huesca, Ph.D.](#) , Carlos Augustus de Lozano Professor of Journalism

[Patrick Keating, Ph.D.](#) , Associate Professor

[Zhaoxi Liu, Ph.D.](#) , Assistant Professor

[Melissa McMullen](#) , Assistant Professor

[Camille Reyes, Ph.D.](#) , Assistant Professor

## Requirements

- [Major in Communication](#)
- [Minor in Communication](#)

## The Major

The requirements for the degree of Bachelor of Arts with a major in Communication are as follows:

### **I. Departmental requirements:**

A. To be accepted as a major in Communication, a student must have successfully completed COMM 1301 (Mass Media) and 2302 (Media Texts).

B. Thirty (30) hours (of which at least 15 must be upper division) of course work in the Department of Communication including:

1. Nine (9) credit hours in core courses (COMM 1301, 2302, 3303)
2. Nine (9) credit hours consisting of one course from each of the following three areas of study. These courses will be chosen in consultation with faculty adviser.
  - a. Three (3) credit hours in media studies (COMM 3321, 3322, 3323, 3325, 3326, 3328, 3-98, 4-90, 4398, 4399)
  - b. Three (3) credit hours in media messages (COMM 3-40, 3-41, 3-42, 3-43, 3-44, 3-45, 3-46)

- c. Three (3) credit hours in media management (COMM 3360, 3361, 3362, 3363, 3364)
- 3. Nine (9) credit hours in electives in the Department of Communication
- 4. Three (3) credit hours in the Communication Capstone Seminar (COMM 4395).

C. A minimum of eighteen (18) hours of course work in another department or program planned to meet the student's interests and approved by adviser.

D. Courses in the Department of Communication exceeding 36 hours must be over and above the 124 hours required for graduation.

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

## The Minor in Communication

The minor in Communication is designed for students who seek to enrich their liberal arts education with a greater understanding of communication.

Requirements for the minor are: Twenty-one credit hours to include COMM 1301, 2302, 3303 and four (4) three-hour elective courses; at least (9) credit hours of the total 21 credit hours required must be upper division.

## Classes

### Core

COMM 1301	Mass Media
COMM 2302	Media Texts
COMM 3303	Media Audiences

### Capstone

COMM 4395	Communication Capstone Seminar
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### Media Studies

COMM 3120	La Telenovela en América Latina
COMM 3321	Arts Criticism

COMM 3322	International Communication
COMM 3323	Environmental Communication in Asia
COMM 3325	Special Topics in Communication Media
COMM 3326	History of Mass Media
COMM 3328	Media, Culture, and Technology
COMM 3-98	Honors Readings
COMM 4-90	Directed Studies in Communication
COMM 4398, 4399	Honors Thesis

### Media Messages

COMM 3-40	Media Writing
COMM 3-41	Audio Communication
COMM 3-42	Visual Communication
COMM 3-43	Print Communication
COMM 3-44	Interactive Multimedia Communication
COMM 3-45	Media Communication Workshop
COMM 3-46	Video Communication

### Media Management

COMM 3360	Principles of Public Relations
COMM 3361	Principles of Advertising
COMM 3362	Media Law and Policy
COMM 3363	Media Management
COMM 3364	Ethics and the Mass Media

### Apprenticeship and Practice

COMM 1194	Internship Experience
COMM 1110, 1120, 1121, 1122, 1130, 1131, 1140, 1150, 1160, 1170	Apprenticeship in Communication Media

COMM 3300	Media Management Practicum and Study
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**Electives**

COMM 1302	Introduction to Film Studies
COMM 2301	International Cinema
COMM 3300	Media Management Practicum and Study
COMM 3354	Quantitative Research Methods
COMM 3357	Sport Media

## Courses

### Lower Division

#### COMM-1110 Apprenticeship in Communication Center Media: Publication Production

Positions for students in one of the student- managed media organizations that provide news and entertainment services and programming for the campus and San Antonio area media. Assignments in writing, reporting, electronic production, and other positions are based on client needs and apprentices' interests, experience, and performance. Time and performance requirements depend on the structure and nature of each organization. Apprentices work under the direct supervision of student managers, faculty, and staff advisors. Pass/Fail. Apprenticeship may be repeated up to 3 hours.

#### COMM-1120 Apprenticeship in Communication Center Media: KRTU Radio Host/Trainee

Positions for students in one of the student- managed media organizations that provide news and entertainment services and programming for the campus and San Antonio area media. Assignments in writing, reporting, electronic production, and other positions are based on client needs and apprentices' interests, experience, and performance. Time and performance requirements depend on the structure and nature of each organization. Apprentices work under the direct supervision of student managers, faculty, and staff advisors. Pass/Fail. Apprenticeship may be repeated up to 3 hours.

#### COMM-1121 Apprenticeship in Communication Center Media: KRTU News

Positions for students in one of the student- managed media organizations that provide news and entertainment services and programming for the campus and San Antonio area media. Assignments in writing, reporting, electronic production, and other positions are based on client needs and apprentices' interests, experience, and performance. Time and performance requirements depend on the structure and nature of each organization.

Apprentices work under the direct supervision of student managers, faculty, and staff advisors. Pass/Fail. Apprenticeship may be repeated up to 3 hours.

### COMM-1122 Apprenticeship in Communication Center Media: KRTU Sports

Positions for students in one of the student- managed media organizations that provide news and entertainment services and programming for the campus and San Antonio area media. Assignments in writing, reporting, electronic production, and other positions are based on client needs and apprentices' interests, experience, and performance. Time and performance requirements depend on the structure and nature of each organization. Apprentices work under the direct supervision of student managers, faculty, and staff advisors. Pass/Fail. Apprenticeship may be repeated up to 3 hours.

### COMM-1123 Apprenticeship in Communication Center Media: KRTU Audio Production

Positions for students in one of the student- managed media organizations that provide news and entertainment services and programming for the campus and San Antonio area media. Assignments in writing, reporting, electronic production, and other positions are based on client needs and apprentices' interests, experience, and performance. Time and performance requirements depend on the structure and nature of each organization. Apprentices work under the direct supervision of student managers, faculty, and staff advisors. Pass/Fail. Apprenticeship may be repeated up to 3 hours.

### COMM-1130 Apprenticeship in Communication Center Media: Digital Editing

Positions for students in one of the student- managed media organizations that provide news and entertainment services and programming for the campus and San Antonio area media. Assignments in writing, reporting, electronic production, and other positions are based on client needs and apprentices' interests, experience, and performance. Time and performance requirements depend on the structure and nature of each organization. Apprentices work under the direct supervision of student managers, faculty, and staff advisors. Pass/Fail. Apprenticeship may be repeated up to 3 hours.

### COMM-1131 Apprenticeship in Communication Center Media: TigerTV production

Positions for students in one of the student- managed media organizations that provide news and entertainment services and programming for the campus and San Antonio area media. Assignments in writing, reporting, electronic production, and other positions are based on client needs and apprentices' interests, experience, and performance. Time and performance requirements depend on the structure and nature of each organization. Apprentices work under the direct supervision of student managers, faculty, and staff advisors. Pass/Fail. Apprenticeship may be repeated up to 3 hours.

### COMM-1140 Apprenticeship in Communication Center Media: Webpage Production

Positions for students in one of the student- managed media organizations that provide news and entertainment

services and programming for the campus and San Antonio area media. Assignments in writing, reporting, electronic production, and other positions are based on client needs and apprentices' interests, experience, and performance. Time and performance requirements depend on the structure and nature of each organization. Apprentices work under the direct supervision of student managers, faculty, and staff advisors. Pass/Fail. Apprenticeship may be repeated up to 3 hours.

### COMM-1150 Apprenticeship in Communication Center Media: Public Relations

Positions for students in one of the student- managed media organizations that provide news and entertainment services and programming for the campus and San Antonio area media. Assignments in writing, reporting, electronic production, and other positions are based on client needs and apprentices' interests, experience, and performance. Time and performance requirements depend on the structure and nature of each organization. Apprentices work under the direct supervision of student managers, faculty, and staff advisors. Pass/Fail. Apprenticeship may be repeated up to 3 hours.

### COMM-1160 Apprenticeship in Communication Center Media: Underwriting and Development

Positions for students in one of the student- managed media organizations that provide news and entertainment services and programming for the campus and San Antonio area media. Assignments in writing, reporting, electronic production, and other positions are based on client needs and apprentices' interests, experience, and performance. Time and performance requirements depend on the structure and nature of each organization. Apprentices work under the direct supervision of student managers, faculty, and staff advisors. Pass/Fail. Apprenticeship may be repeated up to 3 hours.

### COMM-1170 Apprenticeship in Communication Center Media: Media Management

Positions for students in one of the student- managed media organizations that provide news and entertainment services and programming for the campus and San Antonio area media. Assignments in writing, reporting, electronic production, and other positions are based on client needs and apprentices' interests, experience, and performance. Time and performance requirements depend on the structure and nature of each organization. Apprentices work under the direct supervision of student managers, faculty, and staff advisors. Pass/Fail. Apprenticeship may be repeated up to 3 hours.

### COMM-1194 Internship Experience

Supervised, off-campus work experience in media-related field. Consent of department chair required. May be repeated for up to 3 credit hours.

### COMM-1301 Mass Media

Study of the communication process and critical analysis of the structural relationships within mass media industries.

## COMM-1302 Introduction to Film Studies

This course is an introduction to the artistic, cultural, and scholarly importance of film. The course focuses on the development of film as a complex art form, the evolution of narrative as part of a formal system, the development of the industry and film genres, critical and cultural approaches to film analysis, and the construction of the audience. Students will read excerpts from primary texts as well as more general texts dealing with film interpretation and criticism. (Also listed as FILM 1301).

## COMM-2301 International Cinema

This course focuses on the cultural and critical analysis of international films as an expression of particular artistic genres and/or styles within specific historical, ideological, and cultural contexts. Films selected have achieved wide, critical acclaim; others reveal unique and important visions of human experience; while still others are selected for their political, ideological, or sociological significance. Students should develop an awareness that the medium of film has a history and that its history is not confined to national boundaries. (Also listed as FILM 2301)

## COMM-2302 Media Texts

A critical study of the aesthetics, interpretation, and criticism of media messages.

## Upper Division

### COMM-3120 La Telenovela En America Latina (the Latin American Soap Opera)

An examination of the Latin American telenovela, or soap opera, from the perspectives of development communication, popular culture, and international television. This course will be conducted entirely in Spanish. (Also listed as CLAC 3107.) Prerequisites: SPAN 2302, the equivalent, or consent of instructor.

### COMM-3300 Media Management Practicum and Study

Integration of work experience and study of management in information companies. Specific study areas include personnel, organization, programming and content policies, ethics and professional responsibilities, regulation, finance, sales, promotion, audiences, and administrative problems in newspapers, magazines, radio, television, cable, web publishing, and public relations and advertising companies. Includes a major project or case study related to management practices. Students are selected for management positions in media organizations including KTRU-FM, Publication Production, TigerTV, and Multimedia Production. Prerequisites: Junior status, recommendation of departmental faculty, and approval of instructor.

### COMM-3303 Media Audiences



A study of audiences, how they use and are affected by media. Prerequisites: COMM 1301 and 2302 or Consent of Instructor

### COMM-3321 Arts Criticism

Integration and understanding of the role of the artist, the audience, and the critic in relation to the arts.

### COMM-3322 International Communication

Studies communication as an essential component of international organizations and relations. Surveys major topics in international communication and international decision-making, comparative media systems and national philosophies, and Third World issues and policy development. Prerequisite: COMM 1301 or permission of instructor. (Also listed as HCOM 3374.)

### COMM-3323 Environmental Communication in Asia

This class analyzes media discourses, including news media and social media, about prominent cases of pollution, clean up, or other issues related to the environment in an Asian country, such as China. Through such analysis, this class explores the relationships among the media, government, public, and environmental groups within the context of that particular country. It provides a close look at the country's environmental issues and how various social forces contest over the discourse of the issues. (Offered every other year.) Prerequisite: COMM 1301 or Consent of instructor

### COMM-3325 Special Topics in Communication Media

Study and analysis of contemporary communication media topics offered at the initiative of the faculty. Past topics have addressed issues of representation in media, media effects, political communication, media criticism, and the role of various media in society. May be repeated when topics vary. Prerequisites: COMM 1301 or Consent of Instructor

### COMM-3326 History of Mass Media

A survey and analysis of American mass media from the rudimentary colonial newspaper through the 20th century development of radio, television and film. Media contributions to the flow of information, opinion and culture will be studied as a counterpoint to changes in social and political processes. Prerequisite: COMM 1301.

### COMM-3328 Media, Culture and Technology

Examines the economic, historical and social context of evolving communication technologies and how media help to structure, maintain, and alter power relations in contemporary society. Special attention is given to the creation and maintenance of subcultural groups by and through the media. Prerequisites: COMM 1301 and Junior status.

### COMM-3-40 Media Writing

Understanding and using the written word by conceptualizing, gathering information, researching, writing, and editing a variety of material. Classes may stress one or more genres, formats, or themes. Past topics have covered magazine writing, news writing, broadcast writing, public relations writing, public affairs reporting, Internet journalism, and cultural affairs reporting. May be repeated when topics vary. Will be offered for either 3 or 4 semester hours. Prerequisite: COMM 2302 or consent of instructor.

### COMM-3-41 Audio Communication

Understanding and using audio through conceptualizing, gathering information, writing, editing, and producing aural communication. Classes may stress one or more genres, formats, or themes. Past topics have addressed community radio and alternative communication. May be repeated when topics vary. Will be offered for either 3 or 4 semester hours. Prerequisite: COMM 2302 or consent of instructor

### COMM-3-42 Visual Communication

Understanding and using visual communication techniques through conceptualizing, creating, and editing visual media productions. Classes may stress one or more genres, formats, or themes. Past topics have addressed narrative fictional video production, documentary, and theory and practice of montage. May be repeated when topics vary. Will be offered for either 3 or 4 semester hours. Prerequisite: COMM 2302 or consent of instructor.

### COMM-3-43 Print Communication

Understanding and using print editorial techniques and graphics through conceptualizing, gathering information, writing, editing, and producing print publications. Classes may stress one or more genres, formats, or themes. Past topics have covered magazine production/publishing, and newsletter production. May be repeated when topics vary. Will be offered for either 3 or 4 semester hours. Prerequisite: COMM 2302 or consent of instructor.

### COMM-3-44 Interactive Multimedia Communication

Understanding and using interactive multimedia techniques through conceptualizing, gathering information, writing, editing, and producing content for the Internet and the World Wide Web. Classes may stress one or more genres, formats, or themes. Past topics have addressed web design, virtual world promotions, game design, and ethnography of massively multiplayer online games. May be repeated when topics vary. Will be offered for either 3 or 4 semester hours. Prerequisite: COMM 2302 or consent of instructor

### COMM-3-45 Media Communication Workshop

Media communication production and procedures, to be offered at initiative of the faculty and announced during preregistration. Course may be repeated with departmental approval. 1-6 semester hours. Prerequisite: COMM 2302 or consent of instructor

## COMM-3-46 Video Communication

Workshop on the theory and practice of video production. Students write, photograph, and edit short video projects, while considering the relationship between audiovisual style and meaning. May be repeated when topics vary. Will be offered for either 3 or 4 credit hours. (Offered every semester.) Prerequisite: COMM 2302

## COMM-3354 Quantitative Research Methods

This course provides an overview of quantitative research methods and statistical analysis. Students will learn the basic elements of social scientific inquiry, including: 1) quantitative research design and methodologies; and 2) statistical analysis and hypothesis testing procedures. Students will display their knowledge by applying quantitative research methods to help understand and predict social phenomena . (Also listed as HCOM 3354.)(Offered every semester).

## COMM-3357 Sport Media

This course will critically examine the relationship between sport media issues such as race, gender, sexuality, nationalism, capitalism/consumerism, violence, and civic life. Ethical implications and the impact of social will also be explored. (Also listed as SPMT 3317) Prerequisite: COMM 1301 or SPMT 1312 or Consent of Instructor

## COMM-3360 Principles of Public Relations

Covers both principles and techniques of public relations from the management and social science viewpoint of managing ideas, publics, corporate or personal images. Prerequisite: COMM 1301.

## COMM-3361 Principles of Advertising

Advertising fundamentals in relationship to modern marketing activities, audience analysis, and the planning of advertising campaigns. Prerequisite: COMM 1301.

## COMM-3362 Media Law and Policy

Study of issues in the contemporary media policy environment with special focus on "freedom of the press" in relation to emerging electronic communication technologies. The course adopts a broad historical and cultural approach to the role of the First Amendment in a democratic system (including defamation and libel), and emphasizes the study of the legal relationships that govern the interaction of individuals, groups, and institutions.

## COMM-3363 Media Management

A survey of major management concerns in the print and electronic media. Specific areas to be covered include personnel, organization, programming and content policies, regulation, finance, sales, audiences, and administrative problems in newspapers, magazines, radio, television, cable, and Internet. Prerequisite: COMM 1301.

## COMM-3364 Ethics and the Mass Media

A study of the ethical decisions, going beyond mere legal restrictions, that media practitioners must face in the range of material they present to the public. Survey of literature and case studies. Prerequisite: COMM 1301.

## COMM-3-98 Honors Readings

Independent study in selected areas in preparation for Honors Thesis. May be taken for up to three hours of credit. Prerequisite: Admission to the departmental Honors Program.

## COMM-4-90 Directed Studies in Communication

Independent study that allows advanced students to work on specified projects under the supervision of departmental faculty. 1-6 semester hours. Prerequisites: Advanced students who demonstrate competence in specific areas of study in communications; upper-class standing and permission of instructor.

## COMM-4395 Communication Capstone Seminar

Students will select one of three options to demonstrate their understanding of communication theories and practices: (1) A traditional research paper; (2) A professional paper that investigates a communication issue or serves a client; (3) A significant creative project. In all options, a major component of the capstone course is research and analysis. Prerequisites: Senior or rising senior standing and COMM 1301, 2302, and 3303.

## COMM-4398 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an honors thesis. To be taken only by senior honors students in both terms of their senior year. Includes participation in senior colloquium where students present reports on their Thesis work.

## COMM-4399 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an honors thesis. To be taken only by senior honors students in both terms of their senior year. Includes participation in senior colloquium where students present reports on their Thesis work.

# Communication Management

## Faculty

[J. Charlene Davis, Ph.D.](#) , Professor, Business Administration; Director

[Jennifer Jacobs Henderson, Ph.D.](#) , Professor, Communication

[Yi Liu, Ph.D.](#) , Assistant Professor, Business Administration

[John McGrath, Ph.D.](#) , Professor, Human Communication and Theatre

[Camille Reyes, Ph.D.](#) , Assistant Professor, Communication

## Overview

The minor in Communication Management is an interdisciplinary program that studies both advertising and public relations as part of the management of communication processes by combining mass media, human communication, marketing, and business principles. Students interested in declaring a Communication Management minor should contact Professor J. Charlene Davis; each student will then be assigned to a minor adviser.

## Requirements

### The Minor

The requirements for a minor in Communication Management are:

24 credit hours consisting of 15 hours in required courses and 3 hours in each elective area.

#### **Required Courses: 15 hours**

COMM 3360	Principles of Public Relations
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HCOM 3334	Persuasion
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HCOM 3360	Small Group Communication
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MGMT 2301	Management of Organizations
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MKTG 2301	Principles of Marketing
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**Communication Elective: 3 hours**

COMM 3362	Media Law and Policy
COMM 3363	Media Management
COMM 3364	Ethics and the Mass Media

**Business Elective: 3 hours**

MGMT 3371	Human Resources Management
MGMT 3372	Organizational Behavior
MKTG 3381	Consumer Behavior
MKTG 3382	Integrated Marketing Communications
MKTG 4381	Marketing Management

**Human Communication Elective: 3 hours**

BUSN 3311	Organizational Communication (also listed as HCOM 3362)
HCOM 1333	Public Speaking
HCOM 3362	Organizational Communication (also listed as BUSN 3311)
HCOM 4397*	Human Communication Internship

\* As approved by minor adviser.

# Computer Science

## Faculty

[Seth Fogarty, Ph.D.](#) , Associate Professor

[Albert Xin Jiang, Ph.D.](#) , Assistant Professor

[Matthew Hibbs, Ph.D.](#) , Associate Professor

[Thomas Hicks, Ed.D.](#) , Associate Professor

[Mark C. Lewis, Ph.D.](#) , Professor

[Berna Massingill, Ph.D.](#) , Associate Professor

[Paul Myers, Ph.D.](#) , Caruth Professor of Computer Science

[Yu Zhang, Ph.D.](#) , Professor; Chair

## Overview

The department offers several programs designed to serve a range of student interests and needs:

- The Bachelor of Science in Computer Science is a four-year degree program intended to prepare students for either a career requiring a thorough background in the field or for graduate school. It is modeled to some extent on the curricular recommendations of the Association for Computing Machinery (ACM) and provides both considerable breadth and depth.
- Computing as a Second Major is also a four-year degree program, but one that (like the Interdisciplinary Second Major) cannot serve as a primary (stand-alone) major. It is intended for students whose primary interest is in another field but who also need or want thorough preparation in using computers. Such students will combine a primary major in the chosen field with Computing as a Second Major.
- The Minor in Computer Science is designed to provide students with elementary skills in computing as well as a substantial computing background for graduate studies in fields where computers have become primary research tools.
- The Minor in Management Information Systems is intended for business-oriented students and is designed to give them the technical background needed to manage and transmit information through the use of computers.

## Requirements

- [Bachelor of Science in Computer Science](#)
- [Computing as a Second Major](#)
- [Minor in Computer Science](#)
- [Minor in Management Information Systems](#)

- [Senior Thesis](#)
- [Honors in Computer Science](#)

# Bachelor of Science in Computer Science

Requirements for the degree of Bachelor of Science with a major in Computer Science are as follows:

## **I. Departmental requirements: 49 credit hours including:**

A. Core Principles: CSCI 1120, 1320, 1321, 1323, 2320, 2321, 2322, 3320, 3321, 3322.

B. Departmental Colloquium: Four semesters of CSCI 2094.

C. Curricular Groups: At least three hours from each of the following groups:

- i. Applications Group: CSCI 3311, 3342, 3343, 3352, 3353, 3366, 3-95
- ii. Systems Group: CSCI 3323, 3-96
- iii. Design Group: CSCI 3312, 3345, 3362, 3-97

D. Capstone: One of the following options:

- i. Senior Software Project: CSCI 4385 and 4386.
- ii. Senior Thesis: CSCI 3398, 4398, and 4399 plus additional requirements listed in the section "Senior Thesis" below.

E. Electives: Additional upper-division computer science hours sufficient to total at least 49 credit hours.

## **II. Mathematics requirement:**

Six hours from the following: any MATH course (excluding 1301, 1310, 1330, 3194, 3195); CSCI 2324; PHIL 3340, 3343.

**III. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 hours.

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# Computing as a Second Major

The requirements for Computing as a Second major are as follows:



**I. Completion of a first major from another department.**

**II. Departmental requirements:** 34 hours of computer science including:

- A. Required courses: CSCI 1120, 1320, 1321, 1323, 2320.
- B. Departmental Colloquium: two semesters of CSCI 2094.
- C. 21 additional hours of computer science including at least 18 upper-division hours.

**III. Mathematics requirement:**

Six hours from the following: any MATH Course (except 1301, 1310, 1330, 3194, 3195); CSCI 2324; PHIL 3340, 3343; PSYC 2401; BAT 2301. At most one of the following courses may be counted for this requirement: MATH 1320, PSYC 2401, and BUSN 2301.

**IV. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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## Minor in Computer Science

The requirements for the Minor in Computer Science are as follows:

**I. Departmental requirements:** 22 hours of Computer Science including:

- A. Required courses: CSCI 1120, 1320, 1321, 1323, 2320.;
- B. Departmental Colloquium: one semester of CSCI 2094;
- C. Nine additional hours of upper division Computer Science

**II. Mathematics requirement:** As described for Computing as a Second Major.

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## Minor in Management Information Systems

The requirements for the Minor in Management Information Systems are:

**I. Completion of a B.A., B.S., or minor in Business Administration.**

**II. Departmental requirements:** 16 hours of Computer Science including:

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- A. CSCI 1120, 1320, 1321, 2320;
  - B. Departmental Colloquium: one semester of CSCI 2094;
  - C. Two upper division Computer Science courses from the following list: CSCI 3311, 3321, 3342, 3343, 3345
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## Senior Thesis

### Requirements:

- I. Overall grade point average of 3.0 or better at the time the thesis option is selected.
  - II. Grade point average in computer science of 3.0 or better at the time the thesis option is selected.
  - III. Successful completion of CSCI 3398, and 4399 (normally taken in consecutive semesters beginning in the Spring semester of the junior year).
  - IV. Selection of a faculty committee consisting of a thesis chair chosen from the computer science faculty and two additional faculty members during the semester in which CSCI 3398 is taken.
  - V. A public formal presentation and defense of the thesis during the semester in which CSCI 4399 is taken.
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## Honors in Computer Science

### To be eligible for the distinction of graduation with Honors in Computer Science the requirements are:

- I. Completion of the requirements for the Bachelor of Science in Computer Science.
- II. Completion of the requirements for the Senior Thesis described above.
- III. Grade point average of at least 3.33 or better in all courses prior to the semester of graduation.
- IV. Grade point average of 3.33 or better in all computer science courses prior to the semester of graduation.
- V. A written request for honors consideration, submitted to the department chair in the semester prior to the semester of graduation.

The decision of whether or not to confer the honors designation will be made by the departmental faculty and will be determined by departmental vote. The criteria include quality of the written thesis, quality of the oral presentation, and contribution to the field.

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When a thesis receives the honors designation, this designation is so noted on the student's transcript and announced at graduation.

Students who successfully complete CSCI 4399 with a grade of C or better, but fail to achieve honors status or fail to meet the deadline for submitting a thesis for departmental honors will be considered to have met the capstone requirement for the Bachelor of Science in Computer Science provided that they submit a completed thesis by the end of the semester.

## Courses

### CSCI-1120 Low-Level Computing

Seminar on concepts of computing that are close to the machine level. The course teaches skills such as command line processing and programming in a language that exposes more of the underlying machine. Internal data representations will also be explored. Prerequisite: CSCI 1311 or 1320, or consent of instructor

### CSCI-1300 Essential Information Technology

Introduction to computers and technology in an academic environment, including critical analysis regarding the nature of information itself. Computing hardware, software, files, and formats. Text processing and quantitative analysis. Information management. Graphics, image processing, and visualization. Communication, networking, and the internet. Information ethics, privacy, and legal use of software and data. Solution of problems in these areas with emphasis on information literacy. No credit after completion of CSCI 1321.

### CSCI-1304 Computers and Society

An examination of the impact of computer technology on issues of society and culture. The course will contain several components: an introduction to computing (software and hardware concepts); an introduction to problem-solving using one or more high-level languages/software applications to include information retrieval and processing (numeric, text, and graphics); computer communications; and discussions of the uses and ethical issues surrounding computers in our society. No credit after completion of CSCI 1300, 1320 or 1321.

### CSCI-1311 Introduction to Programming Logic

Introduction to the basics of computer programming and algorithmic thinking for non-science majors. The course focuses on the logic and problem decomposition skills that are critical for understanding computation. Use of a high-level programming language will stress creativity in problem solving using computation, and impart a hands-on understanding of the process of programming. The course will cover many of the most important concepts in programming and computer science, including choice, repetition, and abstraction. No prior experience in programming is necessary. This course assumes familiarity with high school algebra, geometry, and trigonometry.

## CSCI-1312 Introduction to Programming for Engineering

Introduction to programming and algorithmic thinking, taught using tools that emphasize an understanding of the hardware. Top-down design and analysis of algorithms. Computer organization and data representation. Computer programming solutions to several laboratory exercises.

## CSCI-1320 Principles Computer Science I

Intended for Computer Science majors and others who need this specific course to meet requirements in other departments. The course is a concept-oriented introduction to programming and algorithmic problem solving principles. Topics include top-down design; searching and sorting strategies; recursion; computational complexity and analysis of algorithms; and the limits of computation. Aspects of computer organization; computer solutions to problems in graphics, user interfaces, and file manipulation. Computer programming solutions to several laboratory exercises. Prerequisites: First-Year or Sophomore standing; or consent of instructor.

## CSCI-1321 Principles of Computer Science II

Focus on object-oriented programming and the development of software to solve larger problems that can benefit from this approach. Abstraction, polymorphism, multithreading, and networking. Program correctness and program verification, algorithm analysis, and computational complexity. User defined structures, data types. Abstract data types including stacks, queues, linked lists, trees, and heaps. Computer programming solutions to several laboratory exercises. Prerequisite: CSCI 1320 or consent of instructor.

## CSCI-1323 Discrete Structures

Elements of discrete mathematics of particular importance in computer science: propositional and predicate logic; proof techniques, including mathematical induction; recursive functions, definitions, and algorithms; proofs of program correctness; algebra of sets; relations and functions; and elements of the theory of directed and undirected graphs. Application of these structures to various areas of computer science. Prerequisite: CSCI 1311, 1320, or consent of instructor.

## CSCI-2094 Computer Science Colloquium

Departmental Colloquium on research, professional issues, ethics, and other topics.

## CSCI-2195 Competitive Programming

Approaches to algorithmic problem solving; practice with problems that are commonly found in programming competitions. Focuses on the languages and tools used in the annual ACM International Collegiate Programming Competition. May be taken a maximum of four (4) semester hours of credit. Prerequisite: CSCI 1320 or knowledge of programming

## CSCI-2320 Principles of Data Abstraction

Abstract data types and their implementation in an object-oriented environment. Axiomatic systems describing the classical computer science data structures: stacks, queues, lists, trees, graphs, and the like. Analysis of the computational complexity of alternative implementation strategies in the context of the typical algorithmic applications. Prerequisite: CSCI 1321 and 1120

## CSCI-2321 Principles of Computer Design

A study of computer organization and design including emphasis on logical design, the role of performance, the structure of instructions, computer arithmetic, processor control, and methods of performance enhancement. Some attention will also be given to assembly programming. Prerequisite: CSCI 1321, CSCI 1120.

## CSCI-2322 Principles of Functional Languages

An introduction to functional programming. Functional composition, recursion, and iteration. Procedure and data abstraction using functions. Managing state, streams, delayed evaluation, and continuations. Using functional languages as an analytic notation for reasoning about programs. Solution of several laboratory problems.

## CSCI-2323 Scientific Computing

Numerical and text processing methods with problems chosen from the sciences and mathematics. Focuses on the general idea of how computational science has expanded the realm of what is possible in the sciences. Builds on basic programming knowledge to give students understanding and skills as to how computers are used in the sciences. Prerequisite: CSCI 1320, MATH 1311 or 1307.

## CSCI-2324 Numerical Calculus

Introduction to the numerical algorithms fundamental to scientific computer work. Elementary error analysis, interpolation, quadrature, linear systems of equations, and introduction to the numerical solution of ordinary differential equations. (Also listed as MATH 2324.) Prerequisites: CSCI 1320, MATH 1311.

## CSCI-3311 Information Assurance and Security

A contemporary introduction to the broad area of security in computing systems, exploring issues that abound when attempting to secure information in an interconnected society. An information-based examination of risk modeling, assessment and management; ethics; policies and behaviors; cryptography; code security; data security; operating system security; and network security. Approaches to assure information confidentiality, integrity, and availability(CIA). Prerequisite: CSCI 2320

## CSCI-3312 Introduction to Game Development

An introduction to the various aspects of the computer game creation process including coding, game play, narrative development, and artwork. Students will explore the tools and methods of game design and will also work in groups to design and implement a two-dimensional, non-networked game. Prerequisite: CSCI 2320, 3321 is recommended.

### CSCI-3320 Principles of Theoretical Computer Science

Core topics from finite automata, languages and the theory of computation. The Chomsky hierarchy, abstract machines and their associated grammars. Models of computation (e.g., Turing machines), Church's thesis, unsolvability, and undecidability. Computational complexity, intractability, and NP-completeness. Prerequisites: CSCI 2320, 1323, and Junior standing.

### CSCI-3321 Principles of Software Engineering

Issues involved in developing large-scale software systems. Models for the software lifecycle; techniques and tools of analysis, design, programming, testing, debugging, and maintenance. May include formal methods, CASE, expert systems, case studies. Prerequisites: CSCI 2320, 1323, and Junior standing.

### CSCI-3322 Principles of Algorithms

Exploration of standard algorithm construction methods for solving varied problems including a comparison of the different efficiencies of these algorithms when implemented using different data structures. Methods will include branch and bound, backtracking, memoization, greedy algorithms, and dynamic programming. Heuristic-based methods to find non-optimal solutions are also explored, especially for intractable problems. Prerequisite: CSCI 2320

### CSCI-3323 Principles of Operating Systems

Introduction to operating systems. Role and purpose of operating systems. History of operating systems. Processes and process management, including a discussion of concurrency and related issues. Memory management. Input/output and device management. File systems. Operating system security. Prerequisite: CSCI 2321.

### CSCI-3342 Computer Networks

Local area networks, high-speed networks and bridges. Wide area networks and internetworking. Network protocols including OSI protocols. Network security, reliability and performance. Laboratory experience with one or more network protocols. Prerequisite: CSCI 2320.

### CSCI-3343 Database Systems

The goals of DBMS including data independence, relationships, logical and physical organizations, schema and

subschema. Entity relationship diagrams. Hierarchical, network, and relations models. Data definition and data manipulation languages. Query languages, relational algebra, and relational calculus. Data normalization techniques, data security integrity, and recovery. Case studies of several existing systems. Prerequisite: CSCI 2320.

### CSCI-3344 Artificial Intelligence

The purpose of this course is to update the student on state-of-the-art artificial intelligence concepts, such as heuristic programming, state-space search techniques, and/or graphs for problem solving, game playing techniques, theorem proving procedures for propositions and first-order logic, knowledge representation, and examples of knowledge-based systems. Prerequisites: CSCI 1323, 2320.

### CSCI-3345 Web Application Design

An introduction to the development of Web applications and cloud computing. Basics of information sharing on the web and an introduction to a standard Web application framework. Students will work in groups to analyze, design, and implement a Web application. Prerequisites: CSCI 2320, 3321 is recommended

### CSCI-3351 Numerical Analysis I

Methods of solution of algebraic and transcendental equations, simultaneous linear algebraic equations, numerical integration and differentiation, initial and boundary value problems or ordinary differential equations. (Also listed as MATH 3351.) Prerequisites: CSCI 1321, MATH 3316.

### CSCI-3352 Simulation Theory

Introduction to simulation, discrete simulation models, queuing theory, and stochastic processes. Survey of simulation languages. Simulation methodology including generation of random numbers, design of simulation experiments, and validation of simulation models. Prerequisites: CSCI 1320 and knowledge of statistics.

### CSCI-3353 Graphics

Survey of display devices, display data structures, graphics input, 2D transformations, windowing, clipping, viewing, 3D transformations, perspective, depth, hidden line removal. Graphics programming techniques and several laboratory problems using available graphics devices. Prerequisites: MATH 1311, CSCI 2320.

### CSCI-3361 Analysis of Algorithms

Complexity of algorithms, time and space requirements, and trade-offs. Searching and sorting, mathematical algorithms, graph and combinatorial algorithms. Divide and conquer, branch and bound, dynamic programming, exhaustive search. Limitations, intractability and NP-completeness, approximation algorithms. Prerequisites: CSCI 1321, 1323.

## CSCI-3362 Effective Programming Techniques

Effective strategies for programming in contemporary languages, including material on design patterns and other techniques that improve abstraction and reusability of code. Includes a significant group project that requires students to apply material learned in the course. Prerequisite: CSCI 2320, 3321 is recommended

## CSCI-3366 Parallel and Distributed Programming

An introduction to parallel and distributed programming with particular emphasis on algorithm development. Comparison between sequential and parallel algorithm development. Survey of hardware and software for parallel and distributed computing. Comparison of different architectures and programming models. Design, analysis, and development of parallel algorithms. Students will be expected to implement several projects in one or more suitable parallel programming environments. Prerequisites: CSCI 2320

## CSCI-3368 Principles of Programming Languages

An introduction to the syntax and semantics of programming languages. This will include a study of data structures and control structures, proof of programs, a comparison of functional and imperative programming languages, parameter passing, storage allocation schemes, and concurrent language features. Prerequisite: CSCI 2320.

## CSCI-3-90 Directed Study

Credit will vary depending on work done. Prerequisites: CSCI 1323, 2320, and Junior standing

## CSCI-3-93 Special Topics in Theory

Topics will vary depending on student and faculty interest. May be taken for a maximum of six (6) semester hours of credit. Prerequisite: CSCI 1321 and 1323, or consent of instructor.

## CSCI-3-94 Seminar

Topics will vary depending on student interest. May be taken for a maximum of six (6) semester hours of credit. Prerequisites: CSCI 1323, 2320, and junior standing.

## CSCI-3-95 Special Topics in Applications

Topics will vary depending on student and faculty interest. May be taken for a maximum of six (6) semester hours of credit. Prerequisite: CSCI 1321 and 1323, or consent of instructor.

## CSCI-3-96 Special Topics Systems



Topics will vary depending on student and faculty interest. May be taken for a maximum of six (6) semester hours of credit. Prerequisite: CSCI 1321 and 1323, or consent of instructor.

### CSCI-3-97 Special Topics in Design

Topics will vary depending on student and faculty interest. May be taken for a maximum of six (6) semester hours of credit. Prerequisites: CSCI 1321 and 1323, or consent of Instructor; CSCI 3321 is recommended.

### CSCI-3398 Thesis Reading

Independent study in selected areas in preparation for Thesis. Spring. Prerequisites: Junior standing, CSCI 1323 and CSCI 2320 and Consent of Instructor.

### CSCI-4312 Advanced Game Development

A deeper exploration of the concepts presented in CSCI 3312 that provides a setting for students to work in groups on the design and implementation of a three-dimensional or networked game. Includes discussion of 3-D graphics options as well as networking options. Groups will be subdivided into coding, game play, and art subgroups and will work in a structure intended to model professional game studios. Prerequisite: CSCI 3312

### CSCI-4353 Advanced Graphics

Geometric modeling, algorithms for hidden surface removal, shading models, rendering, texture mapping, reflectance mapping, ray tracing, and radiosity. Introduction to animation. Several laboratory programming problems using available graphics devices. Prerequisite: CSCI 3353.

### CSCI-4365 Advanced Theoretical Computer Science

Advanced topics in theory. Closure properties, ambiguity, context-sensitive and recursively enumerable languages, alternate models of computation, non-determinism, decidability, Ackermann's function, computational complexity speed-up. Prerequisite: CSCI 3320.

### CSCI-4385 Senior Software Project I

The analysis and design of an actual large-scale software system. Application of the analysis and design tools within the software life cycle presented in CSCI 3321 (Principles of Software Engineering). Students work in teams under direct supervision of the faculty. Prerequisite: 21 hours of Computer Science

### CSCI-4386 Senior Software Project II

The implementation, testing, and maintenance of the large-scale software systems designed in CSCI 4385.

Students working in teams under direct supervision of faculty implement and demonstrate the deliverable software package. Prerequisite: CSCI 4385.

### CSCI-4398 Thesis I

Individual research and scholarly investigation under faculty supervision leading to the preparation of a senior thesis. To be taken only by students committed to the preparation of a thesis and those who wish to earn the Honors in Computer Science designation. Serves as a part of the departmental capstone requirement. Fall. Prerequisite: CSCI 3398 and Consent of Instructor.

### CSCI-4399 Thesis II

Continuation of CSCI 4398. Must be taken by students who desire honors in computer science. Serves as a part of the departmental capstone requirement. Thesis presentation to departmental faculty and students and a separate thesis defense are requirements for the completion of this course. Prerequisite: CSCI 4398 and Consent of Instructor.

# East Asian Studies at Trinity

## Faculty

[Stephen Lee Field, Ph.D.](#) , J. K. and Ingrid Lee Endowed Professor of Chinese Language and Literature, Modern Languages and Literatures; Director

[Dan Lehrmann, Ph.D.](#) , Gertrude and Walter Pyron Professor of Geosciences

[Zhaoxi Liu, Ph.D.](#) , Assistant Professor, Communication

[Randall L. Nadeau, Ph.D.](#) , Professor, Religion

[Hyon Joo Yoo, Ph.D.](#) , Associate Professor, Political Science

[Jie Zhang, Ph.D.](#) , Associate Professor, Modern Languages and Literatures

[Shage Zhang, Ph.D.](#) , Associate Professor, Finance and Decision Sciences

## Overview

East Asian Studies at Trinity (EAST) is an interdisciplinary undergraduate degree program that combines the intensive study of East Asian languages and cultures with the study of the social sciences and business in an East Asian context. For each student, the study of the language will be fully integrated with the study of other disciplines through each year of the college career, ensuring that the graduate will not only be proficient in the language, but that he or she will have achieved an advanced level of understanding across the curriculum.

## Requirements

- [Major in Chinese Studies](#)
- [Minor in East Asian Studies](#)
- [Guidelines for Acceptance of Majors](#)

## The Major

The requirements for the degree of Bachelor Science with a major in Chinese Studies are as follows:

**I. A core curriculum in East Asian culture (12 credit hours; at least one course from each of the following categories):**

A. Art History, Cinema, and Literature

ARTH 1310	Introduction to Asian Art: China
CHIN 2311	Chinese Civilization
CHIN 3312	Chinese Cinema: A Historical and Cultural Perspective
CHIN 3313	Cities of Strangers: Trans-Cultural Chinese Cinema
EAST 2315	East Asian Heroes

#### B. Civilization and History

CHIN 2311	Chinese Civilization
HIST 1320	History of China
HIST 1324	Modern East Asia

#### C. Philosophy and Religion

PHIL 1302	Introduction to Asian Philosophy
CHIN 3428	The Philosophies of China (also listed as PHIL 3428)
EAST 2316	The Folk Ecology of Fengshui
PHIL 3428	The Philosophies of China (also listed as CHIN 3428)
RELI 1330	Asian Religions

## II. The concentration in Chinese studies:

A. Completion of 21 credit hours of upper division Chinese language and literature courses taught in Chinese.

CHIN 3401	Advanced Chinese I
CHIN 3402	Advanced Chinese II
CHIN 4130	Global Business Culture
CHIN 4310	Advanced Conversation and Composition I
CHIN 4311	Advanced Conversation and Composition II
CHIN 4321	Readings in Modern Chinese Literature
CHIN 4322	Readings in Contemporary Chinese Cinema
CHIN 4351	Classical Chinese
CHIN 4390	Reading and Conference

CHIN 4391 Selected Topics

LAC 3114 Zhongguo Gudai Sixiang (Classical Chinese Thought)

or the equivalent study abroad coursework in Chinese.

B. Completion of 9 credit hours of upper division electives. At least one course must be taken from each of the following categories. Courses not focused solely on China must contain at least one-third of their content on the subject of China.

#### 1. Art History, History, Political Science, and Religion

ARTH 3466 Contemporary Chinese Art (also listed as CHIN 3466)

CHIN 3320 The Rise of Modern China (also listed as HIST 3320)

CHIN 3433 Chinese Religions (also listed as RELI 3433)

CHIN 3343 Chinese Foreign Policy (also listed as PLSI 3343)

CHIN 3366 Governance and Public Policy in Contemporary China (also listed as PLSI 3366 and URBS 3366)

CHIN 3466 Contemporary Chinese Art (also listed as ARTH 3466)

HIST 3320 The Rise of Modern China (also listed as CHIN 3320)

HIST 3324 History of Korea

HIST 4420 Seminar in Asian History

PLSI 3341 East Asian Security

PLSI 3343 Chinese Foreign Policy (also listed as CHIN 3343)

PLSI 3366 Governance and Public Policy in Contemporary China (also listed as CHIN 3366 and URBS 3366)

RELI 3413 Religion and Science in Asia

RELI 3432 Buddhist Ecology

RELI 3433 Chinese Religions (also listed as CHIN 3433)

#### 2. Business and Economics

CHIN 3367 Comparative Views of Modern China (also listed as BUSN 3367, ECON 3367, and URBS 3367)

BUSN 3367 Comparative Views of Modern China (also listed as ECON 3367, CHIN 3367, and URBS 3367)

BUSN 4130 Quanqiu Shangwu Wenhua-Zhong-Mei Jiaodian (Global Business Culture)

BUSN 4364	Internationalizing Intellectual Property (also listed as CHIN 4364)
CHIN 3330	Global Business Culture (also listed as INTB 3330)
CHIN 3363	International Business Research (also listed as INTB 3363)
CHIN 4130	Quanqiu Shangwu Wenhua-Zhong-Mei Jiaodian (Global Business Culture) (also listed as BUSN 4130)
CHIN 4362	International Branding (also listed as INTB 4362)
CHIN 4364	Internationalizing Intellectual Property (also listed as BUSN 4364)

### III. Completion of at least one semester abroad in a Chinese-speaking country.

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## The Minor

Students who want to explore the languages and cultures of East Asia in some depth but whose primary interests lie elsewhere may choose a minor in East Asian Studies. If the following requirements are met, the student's diploma will record the successful completion of a minor in East Asian Studies.

### I. A core curriculum in East Asian culture (6 semester hours; one course from at least two of the following categories):

#### A. Art History and Literature

ARTH 1310	Introduction to Asian Art: China
ARTH 1311	Introduction to Asian Art: Japan
EAST 2315	East Asian Heroes

#### B. Civilization and History

CHIN 2311	Chinese Civilization
HIST 1320	History of China
HIST 1324	Modern East Asia

#### C. Philosophy and Religion

RELI 1330	Asian Religions
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### II. The concentration in an East Asian language:

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A. Completion of 12 credit hours of upper division language and literature courses taught in the target language.

CHIN 3401	Advanced Chinese I
CHIN 3402	Advanced Chinese II
CHIN 4130	Global Business Culture
CHIN 4310	Advanced Conversation and Composition I
CHIN 4311	Advanced Conversation and Composition II
CHIN 4321	Topics in Modern Chinese Literature
CHIN 4322	Readings in Contemporary Chinese Cinema

Or similar coursework in an approved study abroad program in an East Asian country

B. Completion of 6 semester hours of upper division electives taught in English

BUSN 4364	Internationalizing Intellectual Property (also listed as CHIN 4364)
CHIN 3320	The Rise of Modern China (also listed as HIST 3320)
CHIN 3330	Global Business Culture (also listed as INTB 3330)
CHIN 3433	Chinese Religions: Unity and Diversity (also listed as RELI 3433)
CHIN 3343	Chinese Foreign Policy (also listed as PLSI 3343)
CHIN 3363	International Business Research (also listed as INTB 3363)
CHIN 3376	Contemporary Chinese Art (also listed as ARTH 3376)
CHIN 4362	International Branding (also listed as INTB 4362)
CHIN 4364	Internationalizing Intellectual Property (also listed as BUSN 4364)
HIST 3320	The Rise of Modern China (also listed as CHIN 3320)
HIST 3324	History of Korea
INTB 3330	Global Business Culture (also listed as CHIN 3330)
INTB 3363	International Business Research (also listed as CHIN 3363)
INTB 3396	Internship in International Business (with adviser approval)
INTB 4362	International Branding (also listed as CHIN 4362)
PLSI 3331	Political Economy of the U.S., Europe, and Japan
PLSI 3341	East Asian Security

PLSI 3343	Chinese Foreign Policy (also listed as CHIN 3343)
RELI 3433	Chinese Religions: Unity and Diversity (also listed as CHIN 3433)
RELI 3434	Japanese Literature of the Spirit World

When departments offer a relevant course coded under a "special topics" or "variable content" designation, the EAST Committee may approve such courses for inclusion within the major or minor.

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## Guidelines for Acceptance of Majors

Full acceptance is granted if the following requirements are met at the time of application:

- I. Completion of the fourth semester of an East Asian language, or its equivalent, with a grade of C or better.
- II. Completion of the East Asian Studies core curriculum with grades of C or better.

Provisional acceptance may be granted if it is apparent that an applicant can meet the requirements for full acceptance by the end of the semester in which application is made.

## Courses

### EAST-2315 East Asian Heroes

This course introduces literary works that have contributed to discourses about heroes in contemporary East Asia. We will study how the portrayals of heroes reflect historical, social, and cultural changes. Classical and early modern literary texts are analyzed in the contexts of contemporary cultural products. Discussions focus on how narratives of heroes have been one of the most indispensable sources for the construction of political and cultural identities. We also examine how narratives about heroes have evolved to express historically and culturally specific experience and agendas. (Offered every year).

### EAST-2316 The Folk Ecology of Fengshui

This course will survey the environmental history of China, then will delve into the theory and practice of both Form School and Compass School fengshui, and finally will analyze the proposition that fengshui is a type of "folk" ecology. (Offered every other year)



# Economics

## Faculty

[Dennis Ahlburg, Ph.D.](#) , Professor

[Nels Christiansen, Ph.D.](#) , Associate Professor

**Jean Falconer, Ph.D.** , Assistant Professor

[John H. Huston, Ph.D.](#) , Professor

[David A. Macpherson, Ph.D.](#) , E. M. Stevens Professor; Chair

[Shana McDermott, Ph.D.](#) , Assistant Professor

[Maria Pia Paganelli, Ph.D.](#) , Associate Professor

[Ricardo Manuel Santos, Ph.D.](#) , Associate Professor

[Roger Spencer, Ph.D.](#) , Vernon F. Taylor Distinguished Professor

[Richard Salvucci, Ph.D.](#) , Professor

[Edward J. Schumacher, Ph.D.](#) , Professor of Health Care Administration

[Ben Vaughan](#) , Associate Professor of the Practice of Economics

## Requirements

- [Major in Economics](#)
- [Minor in Economics](#)
- [Honors in Economics](#)

## The Major

The requirements for the degree of Bachelor of Arts with a major in Economics are as follows:

### **I. Departmental requirements:**

Economics majors may choose among six separate curricula:

#### **A. General Economics**

Students desiring to major in Economics without selecting a concentration must complete 30 credit hours in Economics, including ECON 1311, 1312, 2301, 3325, and 3326. (MATH 1320 or 3335\* may be substituted for ECON 2301.)

Recommended: MATH 1311.

## **B. Concentration in Theoretical Economics**

This concentration emphasizes mathematics and economics theory. It is recommended as the appropriate preparation for Ph.D. programs in economics.

Departmental Requirements:

1. 30 credit hours in Economics, including:

ECON 1311, 1312, 3325, 3326, 4365, 4367, and 4370;

2. MATH 1311, 1312, 2321, 3316 or 3323, 3326, 3334, 3335, and 3360. (This combination satisfies the requirements for the minor in mathematics.) In addition, MATH 3338 and CSCI 1320 are strongly recommended.

## **C. Concentration in Economics and Law**

This concentration stresses the application of economic theory to questions of the legal and social policy. It is especially appropriate for those planning to enter law school.

Departmental Requirements:

1. 30 credit hours in Economics, including ECON 1311, 1312, 2301, 3325, 3326, and 3339. (MATH 1320 or 3335\* may be substituted for ECON 2301.)
2. ECON 3330 or 3335 or 3356.
3. Three courses, approved by the adviser, from departments other than Economics:
  - a. A course stressing the case method of legal instruction (e.g., BUSN 3302, PLSI 3351);
  - b. An appropriate course in logic, writing, or speech communication (e.g., ENGL 3314, HCOM 1333, PHIL 1341);
  - c. A course that views the law from a perspective other than that of economics (e.g., PHIL 3453).

Recommended: Math 1311

## **D. Concentration in Economics and Business**

This concentration is a liberal arts curriculum designed for students planning to enter graduate schools of business administration. In addition to a solid grounding in Economics, this concentration provides an introduction to many of the basic business subjects that students will encounter in MBA programs.

Departmental Requirements:

1. 30 credit hours in Economics, including:

- a. ECON 1311, 1312, 2301, 3325, and 3326 (MATH 1320 or 3335\* may be substituted for ECON 2301);
- b. ECON 3329 or 3362;
- c. ECON 3335 or 3328 or 3356;
- d. ECON 3347 or 3348 or 3361.

2. 18 credit hours outside Economics, including:

ACCT 1301, BUSN 3302, BAT 2302, MKTG 2301, FNCE 3301, and MGMT 2301.

Recommended: MATH 1311 and MATH 1312.

### **E. Concentration in International Economics**

The focus of this concentration is the analysis of two general phenomena: a) economic transactions across international borders, and b) the role of international institutions in shaping international economic life. Besides a firm basis in economic theory, international economics provides an ideal analytical framework for those students interested in any area of international and comparative studies.

Departmental Requirements:

A. 33 credit hours in Economics, including:

1. ECON 1311, 1312, 2301, 3325, 3326, 3347, and 3348. (MATH 1320 or 3335\* may be substituted for ECON 2301.)
2. ECON 3340 or 3341 or 3342 or 3343 or 3361.

B. Three upper division credit hours in a modern foreign language.

C. Two courses, approved by the adviser, that emphasize current sociopolitical aspects of:

1. A foreign country;
2. A group of foreign countries; and/or
3. The relations between several countries or areas of the world.

Recommended: MATH 1311.

### **F. Concentration in Economics and Public Policy**

This concentration emphasizes the application of economic analysis to the design and implementation of public policy. It is especially appropriate for students intending to pursue careers and/or graduate study in public policy or public administration.

Departmental Requirements:

A. 33 credit hours of Economics including:

1. ECON 1311, 1312, 2301, 3325, 3326, 3347, and 3348. (MATH 1320 or 3335\* may be substituted for ECON 2301.)
2. Two of ECON 3334, 3335, 3328, and 3339 (with approval of the adviser, ECON 3340 or 3347 may be substituted for one of these).

B. A course taught by the case method of instruction (e.g., BUSN 3302, PLSI 3351) .

C. Two courses that examine the analysis of implementation of public policy from a perspective other than that of economics (e.g., HCAD 3350, PLSI 3413, URBS 3336/PLSI 3316).

D. PLSI 1301.

Recommended (strongly recommended for students planning on advanced degree in public policy/public administration): MATH 1311, MATH 1312, ECON 3334, and ECON 4370.

Prospective majors should note that the Department has requirements for admission to the major. Full acceptance will be granted when the student has completed both Principles courses (ECON 1311 and 1312) with an average grade of C or better. Successful completion of the major also requires at least a C average across the four Principles and Intermediate Theory courses (ECON 1311, 1312, 3325, and 3326).

\* Students intending to use MATH 3335 to fulfill this requirement should note that MATH 1311, 1312, 2321, and 3334 are prerequisites for that course.

## II. University requirements:

Completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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## The Minor

Students who wish to explore Economics in some depth but whose primary interests lie elsewhere may choose a minor in Economics. The minor requires 18 credit hours of Economics, including ECON 1311, 1312, and either 3325 or 3326. At least half the 18 credit hours must be in upper division courses, and at least nine credit hours must be taken at Trinity. None of the courses used to satisfy these requirements may be taken Pass/Fail.

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# Honors in Economics

The Economics Department offers an honors thesis option to its majors. Candidates must have a 3.5 grade point average in economics, approval by a majority of the economics faculty and permission of the faculty member directing the thesis. The six hours for the thesis must be in addition to the hours required for the major. Please see the Chair of the Department for further details.

## Courses

### Economics - Lower Division

#### ECON-1311 Principles of Microeconomics

An introduction to the economic organization of society, with emphasis on how markets, prices, profits and losses guide and direct economic activity. Throughout the course, economic analysis is applied to a wide range of contemporary problems and issues.

#### ECON-1312 Principles of Macroeconomics

The theory and measurement of changes in the levels of prices, employment, national income and other aggregates. Topics addressed include money and the banking system, international economics, unemployment and inflation, and government stabilization policy. Prerequisite: ECON 1311

#### ECON-2301 Statistics for Business and Economics

Applications of statistical techniques to business and economics. Sampling, tests of hypotheses, regression and other statistical techniques and their implementation using modern statistical software. (Also listed as BAT 2301.) (Offered every semester).

#### ECON-2310 Adam Smith's Wealth of Nations

By exploring Adam Smith's *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776), this course will evaluate Smith's leading theories regarding the economy, government, and society and will test these theories against our contemporary understandings. The course will engage such questions as, What is wealth? What is an empire? What are the proper functions of government?

## Economics - Upper Division

### ECON-3115 Economists in the Elementary Schools

The application and communication of economic ideas in an educational context. Teams of Trinity students help teach Economics in local elementary schools by creating and leading hands on activities that illustrate and apply fundamental economic concepts. May be repeated for credit with permission of the instructor. Prerequisite: ECON 1311 or one of the Education Practicum courses (EDUC 2201, 2202, or 2203) and consent of instructor

### ECON-3116 Economists in the Middle Schools

The application and communication of economic ideas in an educational context. Teams of Trinity students help teach Economics in local middle schools by creating and presenting applications of fundamental economic concepts. May be repeated for credit with permission of the instructor. Prerequisite: ECON 1311 and consent of instructor

### ECON-3117 Economists in the High School

The application and communication of economic ideas in an educational context. Teams of Trinity students help teach Economics in local high schools by creating and presenting applications of fundamental economic concepts. May be repeated for credit with permission of instructor. Prerequisites: ECON 1311 and 1312, and consent of instructor.

### ECON-3141 La economía mexicana (The Mexican Economy)

Examination of significant contemporary issues affecting the economic life of Mexico: analysis of international, agricultural, financial, communications, and/or labor sectors of the economy and their relationship to Mexico's macroeconomic performance; special attention to the political situation in Mexico and its impact on the economy. (Also listed as LAC 3101.) Prerequisites: SPAN 2302, ECON 1311, and 1312 or 3318; or consent of instructor.

### ECON-3315 Iceland - Its Unique Geological, Economic and Cultural History

This course will expose students to the unique economic, geologic, and cultural history of Iceland. The economic aspects will focus on the role of financial markets and monetary institutions in economic booms and crashes using Iceland as a case study, possible solutions to public good problems such as the Icelandic fishing quota, business practices which often prioritize protection of the environment and social responsibility, and the role of international trade in development of a small country. The geological history will emphasize Iceland's plate tectonic setting, volcanism, glacial history and related hazards, geothermal energy, and the effects of climate change. The cultural portion will explore the fundamental role of literature in a country with virtually no illiteracy, and the role of the sagas in the transmission of culture, language, and the law in the country with the oldest parliament in the world. Depending on the student's selection of their research topic, three hours of upper division

credit in Economics, Geosciences, Environmental Studies, Business Administration, or Political Science may be earned, contingent upon approval from the relevant department. (Offered every other year).

### ECON-3318 The Global Economy

An introductory survey of international economics aimed at students interested in political science, diplomacy, world affairs, history, or business. An examination of economic relationships among countries with an emphasis on globalization process and the debate it has produced. Economic analysis is used to study the impact of imposing (or removing) barriers to trade and the problems of the balance of payments and the exchange rate. Special emphasis is given to the changing policy options available to governments, multilateral organizations, non-governmental organizations, and multinational corporations in the rapidly evolving global economy. Prerequisite: ECON 1311. Cannot be taken for credit by students who have taken ECON 3347 or 3348 or 3361.

### ECON-3320 Strategies and Games

An introduction to strategic thinking and the basic concepts of Game Theory, according to which a participant's action depends critically on the actions of other participants. The course emphasizes the application of those concepts in a wide variety of areas, including finance, management, marketing, law, political science, biology, anthropology, and psychology. Topics include but are not limited to games with perfect information, games with asymmetric information, auctions, uncertainty and risk, and evolutionary stable strategies. Prerequisites: ECON 1311 and sophomore standing or permission of the instructor

### ECON-3323 The Economics of Government

Microeconomics analysis of governmental decision-making and the democratic process. Emphasis is on evaluating the economic efficiency of taxation and expenditure decisions of policymakers, and on how institutional arrangements of majority voting, representative democracy, political parties, bureaucracies and special-interest groups affect the decisions. Prerequisite: ECON 1311

### ECON-3325 Intermediate Microeconomics

An analytical study of decentralized economic decision-making, with primary emphasis on markets and prices. The range and precision of the analytical techniques developed in Economics 1311 are expanded substantially; these techniques are applied to a variety of economic situations, issues and problems. Attention is given to the economic efficiency consequences of different market structures in both product and input markets, and of various kinds of government intervention in market processes. Prerequisite: ECON 1311

### ECON-3326 Intermediate Macroeconomics

Theoretical analysis of changes in national income, price level, employment, and the international value of the dollar. Evaluation of alternative stabilization policies. Introduction to economic forecasting. Prerequisites: ECON 1311 and 1312.

## ECON-3327 Sports Economics

The utilization of economic methods to study sports. The economic tools employed come from the fields of labor economics, industrial organization, public finance, game theory, and econometrics. Particular attention will be paid to real world applications to sports issues. Topics will vary over time. Examples of topics: optimal game strategy; player compensation and incentives; government subsidization of the construction of new stadiums; optimal pricing strategies; the mechanisms used by sports leagues to achieve their goals; labor market discrimination; and the causes and consequences of monopsony power in sports. (Offered every other year).

## ECON-3328 Monetary Policy Mkts & Banking

An introduction to the financial system and the impact of money and monetary policy on the economy. Major topics include: the economics of financial markets, the Federal Reserve and fundamentals of the money supply process, and the macroeconomic effects of monetary policy. (Offered every year.) Prerequisites: ECON 1311 and 1312

## ECON-3329 Labor Economics and Labor Relations

Theories of the demand for and the supply of labor. Analysis of human capital formation, labor force participation, income distribution, unemployment, and unions. Case studies in labor relations. (Also listed as MGMT 3311.) Prerequisite: ECON 1312 and 3325. ECON 3325 may be taken concurrently.

## ECON-3330 Economics and the Environment

The economic problem of coping with a finite environment. Study of the interrelationships among economic growth, environmental quality, urban concentration, and resource constraints. Economic analysis of pollution control and other environmental policy problems. (Also listed as URBS 3330). Prerequisite: ECON 1311

## ECON-3333 Health Economics

An introduction to the application of the tools of microeconomics to issues in the organization, delivery, and financing of health care. Economic analysis will be utilized to better understand critical issues in health care such as the level and growth of health expenditures, the role of the government versus the private sector in financing care, the relationship between doctors, hospitals, insurance providers, patients, and employers, and the role of society in providing for the uninsured. (Also listed as HCAD 3333) Prerequisite: ECON 1311 or consent of the instructor.

## ECON-3334 Urban Economics

Analytical study of the reasons for cities to exist, the location of economic activity, the economic base of urban areas and the functioning of urban land markets. Economic analysis of selected urban policy issues such as local economic development, zoning and growth controls, housing, transportation, poverty, crime, and the provision of



local public services. Attention is paid to the urban experience outside as well as within the U.S. (Also listed as URBS 3334). Prerequisites: ECON 1311, and three hours of upper-division credit in either Economics or Urban Studies.

### ECON-3335 Industrial Organization

The determinants of market structure and the effects of market structure on firm and industry behavior. The relationship between industry characteristics and desirable economic performance. Frequent applications to particular American industries. Prerequisite: ECON 1311

### ECON-3336 Antitrust Economics

The role of antitrust policy in the American economy. Examines the major antitrust statutes and court opinions of the United States as they relate to market structures and business practices. Landmark antitrust cases are discussed and analyzed with economic theory in an effort to gain insight into the implications of business practices encompassed by the antitrust laws. The penalties and remedies for antitrust violations will also be discussed. Prerequisite: ECON 1311

### ECON-3338 Government Regulation of Business

Economic analysis of direct government regulatory activity. The course first explores how regulation arises from the political process. These insights, and the tools of microeconomic theory, are then applied to analyze public policy in such fields as electricity, telecommunications, broadcasting, transportation, and safety. (Also listed as BUSN 3338). Prerequisite: Three hours of upper division Economics, or consent of instructor.

### ECON-3339 Economic Analysis of Law

Economic analysis of such basic legal concepts as property, contracts, torts and crime. Economic theory is also applied to the legal system itself, including an examination of such matters as law enforcement, civil procedure, and the effectiveness of legal sanctions. Prerequisite: ECON 3325

### ECON-3340 Economic Growth and Development

An inquiry into the desirability, the methods of measurement, alternative strategies for, and the impact of individuals and groups within society on economic development. A survey of theories of economic development. Case studies in comparative perspective. Prerequisites: ECON 1311 and 1312.

### ECON-3341 Economic Development of Mexico

Economic aspects of Spanish colonialism; the transition to national independence; difficulties associated with the period through 1876; industrialization and development through the Revolution; the takeoff of the modern economy after 1940; contemporary issues. Prerequisite: ECON 1311 and 1312.

## ECON-3342 Latin American Economic History

A selective survey of the principal currents of economic growth and change in Latin America since the sixteenth century. Special attention given to the uneven formation of market economies and to problems associated with colonialism and neo-colonialism; with international financial crises and adjustment; and with ideologically diverse models of development. (Also listed as HIST 3348.) Prerequisites: ECON 1311 and 1312.

## ECON-3343 Slavery and the Atlantic Economy

Interdisciplinary analysis of the Atlantic market joining Europe, Africa, and the Americas from the sixteenth through the nineteenth centuries, with particular emphasis upon slavery, the slave trade, and the development of the "plantation complex." Makes explicit use of economic theory to explain historical change. (Also listed as HIST 3384.) Prerequisites: ECON 1311 and HIST 1354 or HIST 1380 or consent of instructor.

## ECON-3344 Economic and Business History of the United States to 1865

A study of the development of American business and the economy through the U.S. Civil War. (Also listed as BUSN 3344 and HIST 3360.) Prerequisites: ECON 1311 and 3 hours of U.S. history or consent of instructor.

## ECON-3345 Economic and Business History of the United States Since 1865

A study of the development of American business and the economy from the U.S. Civil War to the present. (Also listed as BUSN 3345 and HIST 3361.) Prerequisites: ECON 1311 and 3 hours of U.S. history or consent of instructor.

## ECON-3346 La economía española y la Unión Europea (The Spanish Economy and the European Union)

An examination of Spain's economic development and its position within the European Union. The business, economic, and political transformation of Spain from a struggling nation with an authoritarian regime to an economic power with an open and democratic society are studied. The course also examines the development of European Union, with a special focus on its influence on the Spanish business environment. The experiential component of the course includes visits to businesses, government agencies, and NGO's in Spain. (Also listed as INTB 3346, SPAN 3346, and LAC 3346). (Offered once a year). Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of the instructor.

## ECON-3347 International Trade

A study of the economic theory of international trade and the development of the practices of commercial policy. Emphasis is on the economic analysis of a variety of protectionist policies, the international institutions involved in trade and protectionist issues, the importance of trade for development, issues in international capital flows, and multinational corporations. Practice is provided in reading and understanding published sources of data and

analysis. Prerequisite: ECON 1312 and 3325

### ECON-3348 International Monetary Systems

A study of the principles and practices of foreign exchange, international money markets, the balance of payments, payments adjustment mechanism and the national policies for achieving both domestic and international objectives. Coverage includes the description and history of the relevant national and international institutions. Practice is provided in understanding recent international economic events and current policy issues. (Also listed as FNCE 3348.) Prerequisites: ECON 1311 and 1312.

### ECON-3351 Development of Economic Thought

A survey of the "Great Books" of Economics from Adam Smith's Wealth of Nations to John Maynard Keynes's General Theory. The course is intended to acquaint students with the ideas of the creators of economic theory in an effort to understand the intellectual forces that have shaped modern economic thought. Classical, Marxian, Neo-Classical, Institutional and Keynesian theory will be studied and analyzed against the backdrop of the times in which the ideas were developed. Prerequisite: ECON 1311 and 1312

### ECON-3356 Financial Institutions and Markets

Analytical investigation of the structure, efficiency, and regulation of financial markets and institutions. Topics include determination of the level and structure of interest rates, asset valuation, and the flow of funds between markets, theory and practice of financial intermediation, and the social utility of the financial sector. (Also listed as FNCE 3351.) Prerequisites: Junior standing and ECON 1311 and 1312.

### ECON-3361 International Finance

This course emphasizes the study of the global exchange rate and associated derivatives markets with particular emphasis on foreign risk hedging; the study of financial equilibrium relations and their effects on the international capital markets, and the potential arbitrage opportunities that result in the absence of equilibrium; and the use of case studies to illustrate the application of theoretical tools on the multinational corporate environment. (Also listed as FNCE 3361.) Prerequisites: FNCE 3301 or Consent of Instructor

### ECON-3362 The American Corporation

This course acquaints the student with organization theory, corporate decision-making, and the role of the corporation in society. Contemporary corporate issues are discussed and analyzed through readings and the application of fundamental principles to case studies. (Also listed as BUSN 3313) Prerequisite: ECON 1311

### ECON-3365 Behavioral and Experimental Economics

Uses experimental findings to test existing theories and motivate the development of new ones. Students

participate in both the design and running of experiments. Analyzes the impact of behavioral theories on such topics as trust, reciprocity, time discounting, portfolio choice, and altruism. Behavioral Economics incorporates psychological findings into both traditional economic and game theoretic models of decision making. Experimental Economics studies the design and methodology of economic experiments. Prerequisite: ECON 3325 or permission of the instructor.

### ECON-3366 The Globalized Economy: America and Japan in the 21st Century

The course examines issues such as the interconnection between politics and economics, globalization, multinational corporations, tariffs, free trade agreements and the World Trade Organization, economic development, world financial market crisis, East Asian socioeconomic issues, the Japanese economy, the creation of wealth, and rising economic inequality. All of these issues are essential for an understanding of life in the 21st century, and they are all particularly salient in Japan and the United States of America. The course will also compare marketing and management paradigms in both countries, as well as a description of Japanese lean manufacture production models. (Offered every year). Prerequisite: Consent of Instructor

### ECON-3367 Comparative Views of Modern China

This course represents an overview of the most important economic relationship of the twenty-first century. The global financial crisis that started in 2008 revealed just how much the strategic relationship between China and the United States represents the heart of the world's economy. China has recently surpassed Japan to become the world's second largest economy and America's third largest commercial partner. The rise of China has brought about a reorganization of the global economy and the international balance of power. This new world order carries challenges and opportunities. China remains a communist country with a significant legacy of a command economy. It is also a market economy. Understanding this mixture - capitalism with Chinese characteristics or the Chinese variety Capitalism - is the major aim of this course. We also cover topics relevant to the economic relationship between China and the USA, including international trade and the balance of trade, the Chinese currency system, the growth of China and its growing influence in the international sphere. (Also listed as URBS 3367, CHIN 3367, and BUSN 3367).

### ECON-3-71 Internship

Internships may be arranged with businesses, non-profit institutions, and government agencies. Economic analysis must be performed during the course of the internship, with work load requirements similar to those of a typical Economics course carrying the same number of hours of credit. The sponsoring institution develops a work program, to include written economic analysis, in conjunction with the supervising faculty member and the student. Students are limited to a maximum of six hours' credit for internship experiences. Prerequisites: Six semester hours of economics and permission of the Department Chair.

### ECON-3372 Practica profesional en Espana (Internship in Spain)

A supervised summer internship in Spain. Students enrolled in ECON 3372 will serve as interns with various firms,

trade groups, governmental agencies, or public interest groups where they will work and gain experience related to the Spanish economy and business world. The nature of the student's responsibilities will vary with the internship involved and be subject to the approval of the supervising faculty member. (Also listed as INTB 3372, SPAN 3372, and LAC 3372). (Offered once a year). Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of instructor.

### ECON-3-90 Research Topics

Supervised independent study on selected topics in economics. Prerequisites: Junior standing, 3.0 grade average in economics, and permission of instructor.

### ECON-3-98 Honors Readings

Independent study in selected areas in preparation for Honors Thesis. May be taken for up to three hours of credit.

### ECON-4349 Seminar in Economic Issues

Use of economic analysis and reasoning to better understand current economic issues. Topics vary. Representative selection includes economics of the stock market, Social Security, welfare reform, and topics selected by students from articles in the *Journal of Economic Perspectives*. Emphasis is on oral and written analysis of economic issues, class discussion and debate, and reading of articles by leading economists from sources other than textbooks. Focus is on the questions being asked by economists and the approaches taken to address these questions - that is, what economists do and how they do it. Prerequisites: Six hours of upper-division Economics and Junior standing.

### ECON-4365 Game Theory

The science of strategic thinking. A study of the strategic aspects of situations in which a person's choice depend critically on what other people may choose. Topics include static games with complete information, dynamic games, games with uncertainty and games with incomplete information. Emphasizes the application of game theoretic tools to a broad array of economic issues. Prerequisites: ECON 3325, MATH 1312, and ECON 2320 (or equivalent) or consent of instructor

### ECON-4367 Advanced Microeconomic Theory

This course acquaints the student with classical microeconomic theory and enables him or her to construct mathematical economic models. Topics include: consumer theory; theory of the firm; multimarket equilibrium; decision-making under certainty; optimization over time; theoretical and applied welfare economics. Prerequisite: ECON 3325 and MATH 2321

### ECON-4370 Econometrics

The development of statistical techniques of measurement and inference especially suited to empirical economics. The course covers linear regression, maximum likelihood estimation, and significance tests. The main emphasis is on the proper formulation and testing of hypotheses. Prerequisites: ECON 1312, ECON 3325; ECON 2301 (or equivalent), and MATH 1312 or permission of instructor.

### ECON-4397 Seminar in Economics

Study of theoretical and empirical work in economics from scholarly books and periodicals. Independent research and group discussion. May be repeated when topics differ. Topic A: Microeconomics Topic B: Macroeconomics Topic C: Labor Economics Topic D: Selected topics Prerequisite: Permission of instructor.

### ECON-4-98 Honor Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors students in both semesters of their Senior year.

# Education

## Faculty

[Laura Van Zandt Allen, Ph.D.](#) , Professor; Director of Certification and Assessment; Co-Chair

[Ellen Barnett, Ph.D.](#) , Assistant Professor

[Angela Breidenstein, Ed.D.](#) , Professor

Norvella Carter, Ph.D. , Interim Chair

[Courtney Crim, Ed.D.](#) , Associate Professor

[Rocio Delgado, Ph.D.](#) , Associate Professor

[Patricia Norman, Ph.D.](#) , Associate Professor

[Laurie McGarry Klose, Ph.D.](#) , Associate Professor; Director of School Psychology

[Juan Sepulveda, J.D.](#) , Lillian Radford Visiting Professor

[Heather Haynes Smith, Ph.D.](#) , Assistant Professor

## Overview

## Overview

The Department of Education offers select undergraduate coursework, including a minor in Education, that allows students to explore teaching as a profession and fulfills the prerequisites for admission to the Master of Arts in Teaching degree program, which leads to Texas teacher certification. In addition, the department offers two other masters-level programs, which include the Master of Education in School Leadership and the Master of Arts in School Psychology. Each of these programs is described below.

## Master of Arts in Teaching

The Master of Arts in Teaching (M.A.T.) program offers preparation and certification in Elementary Teaching, Secondary Teaching, and All-Level music. All students entering one of the teaching programs must have earned a bachelor's degree. For elementary, a broad core content basis for the degree is required. For secondary, students must possess a bachelor's or higher degree in the subject area that they plan to teach or participate in a transcript review with an Education adviser to identify an approved teaching field. Supplemental certificates in Special Education and English as a Second Language (ESL) are also available. The Master of Arts in Teaching program is

cohort-based and consists of a summer and two semesters, where, upon successful completion, students will earn a Master of Arts in Teaching degree as well as state certification.

## Master of Education in School Leadership

The School Leadership program is designed to prepare candidates as innovative and transformational school leaders of elementary, middle, or high schools in today's school settings. Emphasis is given to the development of the knowledge, skills, and dispositions required of school leaders in a rapidly changing educational context. Candidates will pursue courses in school leadership, instructional leadership, school law and policy, as well as courses in management, finance, design, and innovations in teaching and learning. An extensive, school-based clinical practice experience will be provided in partnership with the candidate's local school district. The Master of Education degree in School Leadership may be earned by completing 36 credit hours. Upon completion of coursework, clinical practice, and the requisite state certification exam, students will receive Texas' Principal certificate.

## Master of Arts in School Psychology

Trinity University offers a three-year, 60-credit-hour program in School Psychology that prepares graduates to work in schools helping students succeed academically, socially, and emotionally.

Licensed Specialists in School Psychology (LSSPs) are responsible for collaborating with educators, parents, and other professionals to create safe, healthy, and supportive learning communities for all students. The Trinity School Psychology Program addresses knowledge, skills, and experiences in the areas of student evaluation, intervention, and counseling. Consultation and collaboration with parents and teachers is also an important focus of the program. Graduates are prepared to collect and compile data to assist in educational decisions at multiple levels from individual student to the larger class and school environments.

## Military and Experience Policy

In accordance with 19 TAC 228.35(a)(5), the Department of Education at Trinity University evaluates, and may accept, military service, training, or education toward fulfillment of program prerequisite admission requirements.



Military service, training, or education must be directly related to the certificate being sought and may not take the place of certification examinations. To be eligible, individuals must meet one or both of the following requirements:

- Honorably discharged from the U.S. military, or
- Completed a minimum of two years of service in the U.S. military and have been discharged as a result of a service-related disability.

Applicants should include a Joint Services Transcript or other verifiable documentation of military service, training, or education with their application to graduate study.

Applicants who are not military service members or military veterans can request the Department of Education to evaluate previous service, training, or education toward fulfillment of program prerequisite admission requirements. Service, training, or education may not count as part of internship, clinical teaching, or practicum requirements, must be directly related to the certificate being sought, and must be provided by an approved EPP or accredited institution of higher education within the past five years. Applicants should include official transcripts or other verifiable documentation with their application to graduate study.

For more information, contact Dr. Laura Allen at [lallen@trinity.edu](mailto:lallen@trinity.edu) or (210) 999-7598.

## Requirements

- [Minor in Teaching](#)
- [Admission to the Master of Arts in Teaching \(M.A.T\) Program](#)
- [Admission to the Master of Education in School Leadership](#)
- [Master of Education In School Leadership Requirements](#)
- [Admission to the Master of Arts in School Psychology](#)
- [Master of Arts in School Psychology Requirements](#)
- [Application for Certification](#)
- [Certification for Elementary Education](#)
- [Certification for Secondary Education](#)
- [Certification for All-level Music](#)
- [Supplemental Certification for English as a Second Language \(ESL\) and Special Education](#)
- [Fifth Year Graduate Course of Study](#)

## Minor in Teaching

The Minor in Teaching allows students to select a focus on either elementary education (23 hours) or secondary education (20 hours) with a concentration on working with students with special needs or who are English language learners. Completion of the minor fulfills the prerequisites for admission to the M.A.T. program; however, prerequisites can be fulfilled with select coursework outside of the minor (see M.A.T. prerequisites). The minor is

designed for students who are preparing to become teachers or who are interested in teaching English abroad or pursuing service opportunities such as the Peace Corps or City Year.

**I. Core Courses for the Minor: (6 hours)**

EDUC 1331	Understanding Learners with Exceptionalities in School and Society
EDUC 3320	Child and Adolescent Development

**II. Plus two courses in either English as a Second Language (ESL) or Special Education:**

A. ESL Concentration: (6 hours)

EDUC 3344	Teaching in the Bilingual Classroom
EDUC 3345	Principles and Practices for Teaching English Learners

B. Special Education Concentration: (6 hours)

EDUC 3332	Reading Difficulties with Diverse Populations
EDUC 3330	Teaching Students with Learning and Behavioral Problems

**III. Students will then select either the Elementary or Secondary Pathway:**

A. Elementary Pathway: (11 required hours)

EDUC 2201	Practicum: Early Childhood Teaching Exploration
EDUC 3301	Field Seminar in Elementary Literacy EDUCATION   161
EDUC 3341	Teaching Science in Elementary School
EDUC 3351	Mathematics in Elementary School

B. Secondary Pathway: (8 required hours)

EDUC 2202	Practicum: Secondary Teaching Exploration
EDUC 3302	Field Seminar in Secondary

Plus 3 additional hours of electives from among the following courses:

EDUC 4102	Secondary Advanced Field Seminar (up to 3 hours of credit allowed)
EDUC 1310	Seminar on Urban Education Policy and Practice
EDUC 4338	Teaching Reading in Secondary Schools

EDUC 3342      Teaching Science and Mathematics in Secondary Schools

HIST 3388      Methods of Instruction in History

Other ESL or Special Education courses not taken for the concentration (above)

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## Requirements

### Admission to the Master of Arts in Teaching (M.A.T.) Program

Students apply to the M.A.T. program in mid-January of their senior year (by the published deadline) or as post-baccalaureate candidates if they have an earned bachelor's degree or higher. Candidates submit a single, combined electronic application for admission to both the M.A.T. program and Trinity University Graduate Studies. The online application is available at <https://admissions.trinity.edu/apply/>.

In addition to completing the online application, other items required for consideration for entry to the program include:

- I. Required Education courses for the elementary program are: EDUC 1331, 3320, 2201, 3301, 3341, 3351, and CSCI 1300-7 or equivalent. Required Education courses for the secondary program are: EDUC 1331, 3320, 2202, 3302, and CSCI 1300-7 or equivalent. Required Education courses for the All-Level Music program are: EDUC 1331, 3320, 2204, 2205, and CSCI 1300-7 or equivalent. Please note that students may apply without all prerequisite coursework completed; however, all requirements must be completed by July 1st before the M.A.T. program begins.
- II. Official transcripts documenting a cumulative grade-point average of 3.0 or higher overall, and/or on the last 60 undergraduate hours; and in major coursework (GPAs of 2.75 – 2.99 can be considered through an exceptions process and will possibly require additional coursework or assessment).
- III. Official GRE score report (if applicable). Currently enrolled Trinity students and applicants possessing a bachelor's degree from Trinity and/or an earned graduate degree from an accredited institution are exempt from this requirement.
- IV. Four (4) references obtained via the online application process, with one from each of the following categories: (a) a faculty advisor within the applicant's major and/or proposed teaching field; (b) an education professor who has overseen the applicant's field experience or coursework; (c) an individual who has observed the applicant's work with children or youth; and (d) an individual who has supervised the applicant in a job or volunteer position.
- V. Electronic Portfolio documenting the applicant's work with students and any coursework in education (format and examples will be provided).
- VI. A group interview process as well as an individual interview with a faculty panel where the applicant presents his/her electronic portfolio as well as answers questions.

- VII. Written essay completed at the time of the interview.
- VIII. Demonstration of deep content knowledge via transcript review and/or exam scores. Depending upon the strength of a candidate's content preparation in his/her proposed teaching field, the university may request that a candidate take the TExES exam for his/her respective content teaching area to demonstrate the content area proficiency required by the State of Texas for teaching certification. If accommodations are required for any part of the application process due to a special learning need, please provide documentation to the Education Department in advance so that appropriate arrangements can be made. Please note that all candidates admitted to the M.A.T. program will be required to pass a criminal background check with the local school district in which they will intern before receiving an internship placement. Failure to pass this background check will result in the candidate's dismissal from the program since significant coursework is required to be completed within the assigned school setting. As part of the admission process, candidates will be asked to sign a statement indicating their understanding of this requirement.

All application materials will be reviewed by the Council on Teacher Education, a multi-disciplinary university committee that serves as the admission decision-making body for the Master of Arts in Teaching program.

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## Admission to the Master of Education in School Leadership

Interested candidates must receive an initial recommendation from their respective school district or charter organization in order to apply for the program. Once recommended, candidates will complete the online application for graduate studies, including the provision of letters of recommendation, GRE scores (if applicable), and an official transcript. All candidates will be scheduled for a phone interview with a panel of assessors. Candidates who demonstrate a readiness for leadership in the program will then be invited to participate in a daylong leadership simulation held at the university. Once all elements of the admission process are completed, the twenty members of the cohort will be selected, in partnership with their nominating district/charter organization, and offered admissions to the program.

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## Admission to the Master of Arts in School Psychology

Applicants to the School Psychology Program are expected to have the following:

- A bachelor's degree from an accredited college or university. An undergraduate major of psychology or education is preferred, although the program welcomes applications from candidates with other majors.
  - A grade point average of 3.0 for the last 60 credit hours taken. Students with a GPA of 2.6 or higher are eligible for provisional admission.
  - A minimum composite score of 300 (verbal and quantitative sections) on the Graduate Record Examination (GRE). Candidates who already possess a master's degree are exempt from this requirement.
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- Strong academic and professional references (three required).
- An interview with the Program Director.

Applicants must complete an on-line application, submit all required material, and participate in an interview (either on campus or by telephone if out of state) by February 1st for admission to the class beginning in August.

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## Application for Certification

It is necessary to apply for a Texas teacher certificate through the Texas Education Agency upon completion of the Master of Arts in Teaching program. This process will be facilitated by the Director of Certification in the Department of Education. Application for certification must be made during the semester in which the student will complete degree requirements.

All Teacher and Administrator Preparation Program graduates applying for state certification must pass proficiency tests and the TExES examinations in their fields of certification, and pay all applicable fees related to state certification. Candidates in the School Psychology program are required to take and pass the Praxis examination in order to complete their national accreditation.

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## Certification for Elementary Education

Students seeking certification to teach at the Early Childhood-Grade 6 level should complete any academic major and other requirements, as follows:

Note: An asterisk (\*) indicates a course that fulfills a common curriculum requirement.

### I. Education Course of Study

- A. EDUC 1110 and 1210 (recommended).
- B. EDUC 1331\*, 2201, 2202, 3301, 3320\*, 3341, and 3351 are required. EDUC 3302 is recommended.
- C. CSCI 1300-7\* or equivalency is required.

**II. Recommended Courses: In preparation for certification as an EC-6 Generalist, students are strongly encouraged to take as many of the courses listed below as possible, most of which satisfy Common Curriculum requirements.**

ART 2314*	Creative Thinking and the Artistic Process (also listed as ENGL 2340, GNED 2340, MUSC 2340, and THTR 2340)
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CLAS 1305*	Classical Mythology
COMM 2302*	Media Interpretation and Criticism
ECON 1311*	Microeconomics
ECON 3115	Economists in the Elementary School
EDUC 3330	Teaching Students with Learning and Behavior Problems
EDUC 3332	Reading Difficulties with Diverse Populations
ENGL 2303*	American Literature: Colonization to 1900
ENGL 2304*	American Literature: New Realism through the Moderns
HIST 1360*	The History of the U.S. Through Reconstruction
HIST 1361*	The History of the U.S. Since Reconstruction
HIST 3376	History of Texas
HIST 3388	Methods of Instruction in History
HCOM 3360*	Small Group Communication
HCOM 3372*	Intercultural Communication
MUSC 2361	Music in Childhood
MUSC 2362	Music in Early Childhood
PLSI 1301*	American Politics
PLSI 1331*	Comparing Countries
PSYC 1300*	Principles of Psychology
SOCI 1301*	Introduction to Sociology
SOCI 1316*	Places and Regions and Global Context (also listed as URBS 1316)

## Certification for Secondary Education

Students seeking certification to teach at the secondary grades (grades 7-12) in Texas should complete the following undergraduate requirements: Note: An asterisk (\*) indicates a course that fulfills a common curriculum requirement.

### I. Education Course of Study

- A. Teaching Core Courses (required): EDUC 1331 and EDUC 3320.
- B. Secondary Teaching Pathway Courses (required): EDUC 2202 and 3302.

- C. Technology Applications: CSCI 1300 or equivalency (required).
- D. Minor in Teaching and Learning (Secondary Pathway) is highly recommended but not required.

## II. Teaching Fields/Area of Certification

Students seeking secondary certification (grades 7-12 or EC-12 depending on the state certificate) will be certified in one or more teaching fields (the content area) at the end of the Master of Arts in Teaching graduate program. At the undergraduate level, students must complete a major in order to graduate from the university. This major (and additional courses where noted) forms the basis of the requirements for the teaching field and prepares students for the certification content exam. Students may complete more than one major (with any additional content area requirements) in order to attain certification in more than one area. Students need at least one teaching field from among the certificate fields listed below as well as the required education coursework. Trinity only offers certification in the fields listed. Students with a major other than their intended teaching field should speak with a faculty member about certification options.

Courses listed after the major have been identified as important courses that meet the content standards for Texas certification. Some students will be able to take these courses within the major (“including”), while other students will need to take the courses in addition to the major (“plus”). Major advisers and the supplemental adviser within the education department will be able to advise students in each area.

### Certification Areas:

- Art EC-12 Certification
  - **Art Major**, including ART 2470; two (2) of the following courses: 3330, 3340, 3350, 3-60, 3472 or 3380
- Chinese Early Childhood—Grade 12 Certification
  - **Chinese Studies Major**
  - **All language candidates must pass an oral proficiency exam given by the Education Department for program admission.**
- Chemistry 7-12 Certification
  - **Chemistry Major**, plus EDUC 3342
- Computer Science 8-12 Certification
  - **Computer Science Major**, including CSCI 3343  
(Note: CSCI 1307 is required of all candidates for certification, including Computer Science candidates.)
- English Language Arts and Reading 7-12 Certification
  - **English Major**, including ENGL 3346 and EDUC 4338. ENGL 3304, GNED 3328, SOCI 3331, LING 1300, and PSYC 2330 are recommended but not required.

- **French Early Childhood—Grade 12 Certification**
  - **French Major**
  - All language candidates must pass an oral proficiency exam given by the Education Department for program admission.
- **German Early Childhood—Grade 12 Certification**
  - **German Major**, including GERM 3305\*
  - All language candidates must pass an oral proficiency exam given by the Education Department for program admission.
- **History 7-12 Certification**
  - **History Major**, including HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History
  - URBS 1316/SOCI 1316 (recommended)
- **Journalism 7-12 Certification**
  - **Communication Major**, including COMM 3340; two (2) of the following courses: COMM 3341, 3342, 3343, 3344; and two (2) of the following: COMM 3321\*, 3322, 3326, 3328, 3362, 3364
- **Latin Early Childhood—Grade 12 Certification**
  - **Latin Major**, including LATN 3301; plus HIST 3318
- **Life Science 7-12 Certification**

Select from one of the following options:

  - **Biology Major**, including BIOL 3430, plus EDUC 3342
  - **Neuroscience Major**, plus BIOL 3430 and additional upper division Biology courses to equal 24 hours total in Biology, plus EDUC 3342
- **Mathematics 7-12 Certification**
  - **Mathematics Major**, including MATH 3334, plus EDUC 3342 (MATH 3341, 3343, and 3355 are strongly recommended, but not required)
- **Physical Science 6-12 Certification (Student is certified to teach Chemistry and Physics)**

Select from one of the following options:

#### **Chemistry Major**

Plus Physics [PHYS 1111\*, 1309\*, 1112\*, 1310\*, 3323 (prerequisite waived)]

Plus Geoscience [GEOS 1304\* or 1407\*; and 2401\* (lab prerequisite required)]

Plus EDUC 3342

#### **Physics Major**



Plus Chemistry (CHEM 1118\*, 1318\*, 2119\*, 2319\*; 2220, and 2320)

Plus Geoscience [GEOS 1304\* or 1407\*; and 2401\* (lab prerequisite required)]

Plus EDUC 3342

### **Geoscience Major**

Plus Chemistry (CHEM 1118\*, 1318\*, 2119\*, 2319\*; 2220, and 2320)

Plus Physics [PHYS 1111\*, 1309\*, 1112\*, 1310\*, 3323 (prerequisite waived)]

Plus EDUC 3342

- **Physics/Mathematics 7-12 Certification**

Select from one of the following options:

#### **Physics Major**

Plus MATH 1320 or 3334 (MATH 3341, 3343, 3355 are strongly recommended), and EDUC 3342

#### **Mathematics Major**

Plus PHYS [1111\*, 1309\*, 1112\*, 1310\*, 3323 (prerequisite waived)], and EDUC 3342

- **Social Studies 7-12 Certification**

Select from one of the following options:

**History Major**, including HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History

Plus Economics (ECON 1311\*, 1312\*, 3117) [ECON 2301 and one (1) upper division economics course are recommended]

Plus Political Science (PLSI 1301\* and 1331\*)

Plus one of the following courses: URBS 1316/SOCI 1316, PSYC 1300\*, or SOCI 1301\*

**Economics Major**, including ECON 2301 and 3117

Plus History (HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History)

Plus Political Science (PLSI 1301\* and 1331\*)

Plus one of the following courses: URBS 1316/SOCI 1316, PSYC 1300\*, or SOCI 1301\*

**Political Science Major**, including PLSI 1301\* and 1331\*

Plus History (HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History)

Plus Economics (ECON 1311\*, 1312\*, 3117) [ECON 2301 and one (1) upper division economics course are recommended]

Plus one of the following courses: URBS 1316/SOCI 1316, PSYC 1300\*, or SOCI 1301\*

**Sociology Major**, including SOCI 1301\*

Plus History (HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History)

Plus Economics (ECON 1311\*, 1312\*, 3117) [ECON 2301 and one (1) upper division economics course are recommended]

Plus Political Science (PLSI 1301\* and 1331\*)

Plus URBS 1316/SOCI 1316 (Human Geography) or PYSC 1300\*

- **Spanish Early Childhood—Grade 12 Certification**

- **Spanish Major**, including SPAN 3311 or 3312\*
- **All language candidates must pass an oral proficiency exam given by the Education Department for program admission.**

- **Speech 7-12 Certification**

- **Human Communication Major**, including HCOM 1333, 3330, 3360\* or 3362, 3372\*, 4350, 4-80

- **Theatre Arts EC-12 Certification**

- **Theatre Major**, including THTR 1330, 2352 or 2356, 2354 and 3340. In addition, HCOM 2313 is recommended, but not required.

# Certification for All-level Music

(Early Childhood-Grade 12) Students pursue a major in music including courses for certification. Students will be certified to teach music to students age 3 to grade 12. Students should complete the following undergraduate requirements:

## I. Education Course of Study

- A. 2 practicum courses are required (EDUC 2204, 2205).
- B. EDUC 1331\* and 3320\* are required.
- C. CSCI 1300-7\* or equivalency is required.

## II. Music major, including

A minimum of 72 credit hours in music. Students may choose from a choral or an instrumental option.

- *Choral emphasis:* 1000 (7 semesters), 1203, 1103, 1113, 1204, 1104, 1114, 2203, 2103, 2113, 2204, 2104, 2114, 3121, 3223, 3225, 3341, 3342, 4301; 18 credits of applied music in one area (14 of which must be at the level of 22- or above); four (4) credits of applied music in a secondary area; 8 credits of large ensemble, 1161, 3162, 4321, 4361, 4363; and 1 credit of music electives.
- *Instrumental emphasis:* 1000 (7 semesters), 1203, 1103, 1113, 1204, 1104, 1114, 2203, 2103, 2113, 2204, 2104, 2114, 3121, 3223, 3224, 3341, 3342, 4301; 18 credits of applied music in one area (14 of which must be at the level of 22- or above); 1122 (or 1 credit of applied music in a secondary area); 8 credits of large ensemble, 1161, 2161, 2162, 2163, 2164, 4264, 4361, 4362; and 2 credits of music electives.
- *Elementary emphasis:* 1000 (7 semesters), 1203, 1103, 1113, 1204, 1104, 1114, 2203, 2103, 2113, 2204, 2104, 2114, 3121, 3223, 3224 or 3225, 3341, 3342, 4301, 18 credits of applied music in one area (14 of which must be at the level of 22- or above) and 4 credits of applied music in a secondary area, 8 credits of large ensemble, 1161, 3162, 4321, 4361, 4364, and 1 credit of music electives.

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# Supplemental Certification for English as a Second Language (ESL) and Special Education

Our program offers courses leading to supplemental certificates in special education and/or ESL..

## I. Special Education

Students may add a supplemental certificate in Special Education by completing the following undergraduate courses (EDUC 1331\*, 3330, and 3332/3335) and specialized courses during the graduate

year.

## **II. English as Second Language (ESL)**

Students may add a supplemental certificate in English as a Second Language by completing the following undergraduate courses: EDUC 3344, and EDUC 3345 and specialized courses during the graduate year.

Students seeking elementary or secondary certification are encouraged to pursue Special Education and/or ESL supplemental certification. In secondary, the supplemental certificate attaches to the content area certificate.

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## **Fifth Year Graduate Course of Study**

The fifth year of the M.A.T. program consists of a summer session and two semesters (30 hours). Upon completion of the fifth year, students receive a M.A.T. (Master of Arts in Teaching), a professional degree.

### **Those students seeking Certification EC-6**

I. During the graduate year of study, students in general education will complete the following: Summer: EDUC 5350, 5351; Fall: 5339, 5360, 5661; Spring: 5263, 5352, 5763.

II. During the graduate year of study, students pursuing a general education and a supplemental Special Education certificate will complete the following: Summer: EDUC 5350, 5351; Fall: 5339, 5360, 5661; Spring: 5263, 5340, 5464, 5352, 5337.

### **Those students seeking Secondary Certification**

I. During the graduate year of study, students in general education will complete the following: Summer: EDUC 5350, 5351; Fall: 5339, 5370, 5671; Spring: 5273, 5352, 5773.

II. During the graduate year of study, students pursuing a general education and a supplemental Special Education certificate will complete the following: Summer: EDUC 5350, 5351; Fall: 5339, 5370, 5671; Spring: 5273, 5340, 5474, 5352, 5337.

### **Those students seeking Certification All-Level Music**

During the graduate year of study, students in general education will complete the following: EDUC 5339, 5349, 5350, 5351, 5346, 5647, and 5948.

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## Master of Education in School Leadership

The School Leadership program is designed to prepare candidates as innovative and transformational school leaders of elementary, middle, or high schools in today's school settings. Emphasis is given to the development of the knowledge, skills, and dispositions required of school leaders in a rapidly changing educational context. Candidates will pursue courses in school leadership, instructional leadership, school law and policy, as well as courses in management, finance, design, and innovations in teaching and learning. An extensive, school-based clinical practice experience will be provided in partnership with the candidate's local school district. The Master of Education degree in School Leadership may be earned by completing 36 credit hours. Upon completion of coursework, clinical practice, and the requisite state certification exam, students will receive Texas' Principal certificate.

The course of study includes:

ELED 5390	Educational Leadership
ELED 5391	School Management and Finance
ELED 5392	Leadership in Elementary and Secondary Schools
ELED 5393	Research, Assessment and Data-Driven Decision Making
ELED 5394	Clinical Practice—Leadership
ELED 5395	Instructional and Curricular Leadership
ELED 6390	School Law and Policy Analysis
ELED 6393	Community Building and Civic Engagement
ELED 6394	Systems Design and Implementation
ELED 6395	Innovations in Teaching and Learning
ELED 6693	Clinical Practice—Advanced Internship

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## Master of Arts in School Psychology

Trinity University offers a 60-credit hour specialist program in school psychology that is approved by the National Association of School Psychologists (NASP). The Master of Arts in School Psychology is awarded after completing 60 credit hours including two years of full-time study and a third-year internship.

The third-year internship (6 credit hours) consists of a minimum of 1200 clock-hour placement in a school setting. This full-time experience occurs over two consecutive semesters (Fall and Spring) and provides interns with opportunities for supervised work in assessment, counseling, consultation, and program evaluation.

Upon completing the 60-credit hour program, students are eligible for national certification by NASP. The Trinity

University program meets the certification and licensure requirements by states that have adopted NASP standards such as Texas.

The course of study includes:

EPSY 5379	Psychological Assessment: Cognitive and Academic II
EPSY 5380	Biosocial Basis of Behavior and Emotion
EPSY 5381	Human Development and Learning
EPSY 5382	Psychological Assessment: Cognitive and Academic I
EPSY 5384	Behavior Management and Special Education
EPSY 5385	Research Methods I—Advanced Statistics
EPSY 5386	Psychological Assessment: Emotions and Personality
EPSY 5187	Emotional/Personality Assessment Lab
EPSY 5388	Neuropsychological Assessment and Remediation
EPSY 5389	Counseling Theory and Methods
EPSY 6380	Consultation Theory and Methods
EPSY 6381	Research Methods II: Design and Application
EPSY 6382	Group and Family Interventions
EPSY 6185	Developmental Assessment Lab
EPSY 6385	Developmental Assessment: Infants and Young Children
EPSY 6386	Supervised Practicum—School Psychology
EPSY 6388	Legal and Ethical Issues
EPSY 6183	Interventions Lab
EPSY 6384	School Psychology Practice
EPSY 5390	Educational Administration and Organization
EPSY 7380	School Psychology Internship: Part I
EPSY 7381	School Psychology Internship: Part II
EPSY 6389	(Optional Elective) Psychological Assessment II: Emotions and Personality Advanced

# Courses

## EDUC-1105 Seminar on Current Issues in Education

A study of the principal issues in public education that affect teaching and learning. Sessions include field trips to selected institutions in the San Antonio community.

## EDUC-1106 Seminar on School and Community

A study of selected schools and the communities they serve. Seminar includes field trips to school and community sites.

## EDUC-1110 Service Learning in Education

This course will allow undergraduates to design and execute a service learning project in partnership with an area school or community site. In consultation with a faculty advisor, participants will design a suitable project comprising significant volunteer service. Students will prepare a written proposal outlining the intended project, document their field experience, and summarize contributions in a reflective paper. May be taken more than once provided project differs. Prerequisite: Departmental Chair approval required.

## EDUC-1310 Seminar in Urban Education Policy and Practice

This seminar focuses on critical issues involved in urban education in America. The course will introduce students to a broad framework for considering educational equity and accountability that includes schools, teachers, students, parents and community, government, and the broader society. The class will feature field experiences and dialogue introducing students to the primary policy debates in urban education including: the Elementary and Secondary Education Act, school desegregation and re-segregation, charter schools, assessment and evaluation, teacher quality, the dropout problem, and culturally responsive teaching. School Visits and field site research will be integral course activities. (Offered every Fall.)

## EDUC-1331 Understanding Learners With Exceptionalities in School and Society

An introduction to the causes, characteristics, strategies, trends, and issues in teaching students with exceptionalities. Identification, assessment, and instruction for learners with exceptionalities, including English Language Learners, are discussed. Students will engage in studies of human exceptionality and explore the legal and theoretical foundations for supporting diverse learners. Students will learn about planning and providing instruction that is differentiated, inclusive, and incorporates universal design principles, technology and instructional tools with appropriate accommodations, modifications, and interventions. This course includes a field placement working with students with exceptionalities in a range of educational and community settings. (Offered every semester).

## EDUC-2201 Practicum: Early Childhood Teaching Exploration

An introduction to the development needs of young children in conjunction with a field placement in one or more early childhood classrooms. Study will include learning and teaching in early childhood classrooms. (Offered every Spring).

## EDUC-2202 Practicum: Secondary Teaching Exploration

This course provides an exploration in secondary teaching and a foundation for continued study in the Master of Arts in Teaching program. It focuses on adolescent learners and their development, as well as teacher and school best practices. The course provides experiences in secondary classrooms and schools. (Offered every Fall).

## EDUC-2204 Practicum: Music EC-6

An introduction to music in the preschool through the fourth grade in conjunction with a field placement in a pre-kindergarten or elementary music classroom.

## EDUC-2205 Practicum: Music 5-12

An introduction to music in the middle schools and high schools in conjunction with a field placement in a middle or high school band, orchestra, or choral music program.

## EDUC-3301 Field Seminar in Elementary Literacy

A study of literacy learning and instruction in the elementary school that integrates theory (seminars) and practice (field experiences). (Offered every Fall). Prerequisite: EDUC 2201.

## EDUC-3302 Secondary Field Seminar

A study of innovation and best practice in secondary school teaching and organization. The course integrates theory (seminars, reading and research) with practice (school and classroom experiences). (Offered every Spring).

## EDUC-3320 Child and Adolescent Development

The cognitive, emotional, and social factors influencing children and adolescents in contemporary society will be explored. Emphasis will be placed on practical application of current theories in human development and learning related to the family, school, and peer groups. (Offered Every Semester)

## EDUC-3321 Schooling in America

A study of the American school and its role in contemporary society. Includes an analysis of the literature related



to effective schools and successful teaching and learning practices.

### EDUC-3330 Teaching Students With Learning and Behavior Problems

The purpose of this course is to develop skills and knowledge relative to providing instruction, interventions, and leadership in curricular and instructional methods and strategies appropriate for use with individuals who exhibit learning and behavior problems. Issues and trends in the identification, systems, and assessment of students with learning and behavior problems will also be addressed. This course includes a 20-hour field experience, where emphasis is placed on learning about strategies and specialized methods of instructing students with learning and behavior differences. (Offered every Fall).

### EDUC-3332 Reading Difficulties With Diverse Populations

This course focuses on learning about reading theory, assessment, materials, and strategies for instructing diverse elementary school students with reading difficulties. On-site supervised experiences will focus on conducting assessments and developing instructional plans for students. Credit may not be earned for both EDUC 3332 and 3335. Prerequisite: EDUC 1331

### EDUC-3333 Positive Behavioral Supports for Students With Challenging Behavior

An introduction to the principles of positive behavioral supports and their application to designing effective classrooms for students with challenging behaviors. This course includes a field placement where teachers will learn strategies to reduce behavior challenges of students with and without identified disabilities.

### EDUC-3335 Reading Difficulties With Diverse Population in the Middle School

This course focuses on learning about reading theory, assessment, materials and strategies for instructing middle school students with reading difficulties. On-site supervised experiences will focus on conducting assessments and developing instructional plans for students. Credit may not be earned for both EDUC 3335 and 3332. Prerequisite: EDUC 1331

### EDUC-3341 Teaching Science in Elementary School

This course is designed to introduce pre-service elementary teachers to the principles of curriculum design and instruction for teaching science to elementary school teachers. Pre-service teachers in the course explore relevant research, national and state science standards, and curricular resources in an effort to understand the history, goals, and methods of science education. Class work throughout the semester is organized around the development of a project-based science unit that may be enacted in pre-service teachers' future classrooms.

### EDUC-3342 Teaching Science and Mathematics in Secondary Schools

This course is designed to introduce undergraduate pre-service teachers to the principles of teaching science and

mathematics to middle and high school students. The course will examine the state and national content standards, discuss results from recent research on learning, and explore the implications of standards and research on curriculum design, instruction, and assessment practices in secondary science and mathematics classrooms. Class work throughout the semester is organized around the development of a project-based science unit that may be enacted in pre-service teachers' future classrooms. (Offered every Spring).

### EDUC-3344 Teaching in the Bilingual (English/Spanish) classroom

An introduction to the education of second language learners in the context of bilingual education and English as a second language (ESL) programs. This course includes field experience in working with bilingual and ESL populations in an educational setting. (Also listed as CLAC 3344)

### EDUC-3345 Principles and Practices for Teaching English Learners

This course is designed for students who would like to add the English as a Second Language (ESL) supplemental certification to their teaching credentials in the MAT program or for students who may wish to teach English abroad through international programs such as the Peace Corps or teaching abroad programs. The course will focus on the design and application of ESL instruction using research-based ESL strategies and the identification and use of appropriate ESL materials.

### EDUC-3351 Mathematics in Elementary School

This course examines key content, strategies and skills as well as methods of teaching and learning mathematics at the Early Childhood - Grade 6 level. The pre-service teachers in this course will reflect on their beliefs about teaching and learning mathematics and beliefs about how children learn mathematics. Assignments will familiarize students with the state and national instructional standards for Early childhood - Grade 6 level mathematics.

### EDUC-4100 Senior Seminar

In this capstone course, students will integrate their experiences in the undergraduate course of study in education and the liberal arts and sciences. Individually and collectively, students from EC-4, 4-8, and 8-12 certification levels will examine issues in education from multiple perspectives through seminars and discussions, inquiry and research, and the on-going development of a portfolio. Students will have the opportunity to work closely with a faculty member and peers to organize, integrate, and extend their knowledge of schooling in the United States. This course fulfills the Senior Experience requirement of the University's Common Curriculum. Prerequisite: Senior Standing.

### EDUC-4102 Secondary Advanced Field Seminar

The course provides students who have completed the Secondary Field Seminar (EDUC 3302) the opportunity for additional school-based experience via a placement with a secondary teacher. This course can be repeated for up

to 3 credits with different school-based placements. (Offered every semester). Prerequisite: EDUC 3302

### EDUC-4338 Teaching Reading in Secondary Schools

The study of literacy and learning in Grades 4-8 with an emphasis on the development of reading and writing processes as well as teaching reading in the content areas. (Offered every Fall).

### EDUC-4341 Workshop in Education

Intensive study into some facets of the school curriculum. Equivalence of 3 class hours a week for 1 semester; may be taken more than once provided content differs.

### EDUC-4-90 Problems in Education

Independent study in selected areas. One to six semester hours. Prerequisites: Departmental approval and six semester hours of Education.

## Master of Arts in Teaching

### EDUC-5334 Curriculum Inquiry and Practice in Special Education

A study of the historical and recent curriculum development trends; the impact of national curriculum studies and movements; and current issues in curriculum planning and assessment as they relate to creating and modifying curricula for students with academic deficiencies.

### EDUC-5335 Teaching Inquiry and Practice in Special Education

Presentation of curriculum and instructional approaches to teach special education and high-risk students. Study of methods, strategies, and materials to remotivate, reinforce, and instruct students with academic deficiencies in the least restrictive setting. Field placement required.

### EDUC-5336 Clinical Practice in Special Education

Exploration of programming techniques appropriate for students with learning problems. Topics include interpretation of assessment as it relates to learning styles, individualization of instruction, classroom management, and interaction with teachers, administrators, and aides. On-site observation and participation. Fall semester.

### EDUC-5337 Advanced Clinical Practice-Special Education

Demonstration of special education teaching methods and behavior management approaches in the classroom. Study of evaluation procedures to determine program and individual progress in special education and related services. Students will be assigned to a special education classroom for the student teaching experience.

### EDUC-5338 Teaching Reading in the Secondary Grades

The study of literacy and learning in Grades 6-12 with an emphasis on the development of reading and writing processes as well as teaching reading in the content areas. (Offered every Fall).

### EDUC-5339 Teaching Diverse Learners

This course examines programming and instructional strategies to facilitate effective instruction of culturally and linguistically diverse (CLD) students with and without disabilities. Applied experience incorporated into the Master of Arts in Teaching's fifth-year internship.

### EDUC-5340 Advanced Seminar in Special Populations

This course supplements M.A.T. interns' clinical practice for those pursuing supplemental certificates in special education and/or English as a second language (ESL). The course provides an opportunity for students to experience the continuum of placements in which special populations receive services.

### EDUC-5342 Diagnosis and Remediation in Reading

Methods of diagnosing and remediation of reading disabilities in individual pupils. Remedial reading is considered from the viewpoint of prevention as well as correction.

### EDUC-5-45 Independent Study

Independent study in selected areas. One to six semester hours. Approval of advisor and instructor.

### EDUC-5346 Music Pedagogics

A field-based course dealing with music education in the elementary, middle and high schools.

### EDUC-5647 Clinical Practice in Music

A supervised internship in music education in the elementary, middle and high schools.

### EDUC-5948 Advanced Clinical Practice in Music

An independent, but supervised, internship in music education in the elementary, middle, and high school.

Prerequisite: EDUC 5647.

### EDUC-5349 Advanced Music Pedagogics

A field-based course dealing with the administration and supervision of programs in music education in the elementary, middle, and high schools. Prerequisite: EDUC 5346

### EDUC-5350 Curriculum Inquiry and Practice

A study of the historical and recent curriculum development trends; the impact of national curriculum studies; current issues in curriculum planning and assessment; competing theories of curriculum design; and in-depth study of the content taught in public schools focusing on Early Childhood - Grade 6, Grades 4-8, or Grades 8-12.

### EDUC-5351 Teaching Inquiry and Practice

An analysis of the research on teaching and models of teaching, contingency theories of teaching, the role of the teacher as decision maker and the nature of reflective practice. Emphasis is given to how scientific knowledge and context-specific knowledge can be used to inform professional judgment and to create knowledge in use.

### EDUC-5352 School Leadership, Supervision and Evaluation

A study of basic concepts, techniques and practices for understanding school leadership as it affects teacher professionalism and school improvement. Emphasis is given to the teacher's leadership role in collegial and clinical supervision, mentoring, staff development and evaluation. Concepts and practices are examined from political and nonrational perspectives of how schools as organizations work.

### EDUC-5353 Elementary Reading and Literacy

An introduction to the essential components of reading instruction, including vocabulary, comprehension, fluency, phonics, and phonemic awareness. Emphasis will be placed on how to effectively teach reading to diverse populations by exploring the meaning of reading, assessing students' reading progress, and identifying instructional strategies to help students grow as readers. (Offered every year.)

### EDUC-5360 Pedagogics: Early Childhood-Grade 6

The study and application to teaching and learning of elementary school curriculum and methodology. Experiences in the university and the public schools are used to interpret, apply, and evaluate elementary school teaching and learning practices. Planning and teaching through various modalities and techniques is researched and developed to enhance individual teaching and learning styles.

### EDUC-5661 Clinical Practice: Early Childhood- Grade 6

A supervised internship in elementary school sites where comprehensive experiences involving the school and community are provided. Students work with a team of professors, classroom teachers, and other school personnel to research, assess, and assimilate the teaching-learning process. These teams rotate through a variety of settings in the elementary schools. To be taken concurrently with EDUC 5360.

#### EDUC-5263 Graduate Intern Seminar: EC-6

This weekly seminar is designed to help interns prepare for and make sense of their classroom-based experiences. Interns engage in action research, develop an exit portfolio, examine student work through use of protocols, and discuss professional readings. To be taken concurrently with EDUC 5763 or EDUC 5464.

#### EDUC-5763 Advanced Clinical Practice: Early Childhood - Grade 6

An internship in elementary school sites where students assume full responsibility for teaching and classroom management in an independent, but supervised experience for a full semester.

#### EDUC-5464 Advanced Clinical Practice: Early Childhood - Grade 6

An internship in elementary school sites where students assume full responsibility for teaching and classroom management in an independent, but supervised, experience for a full semester. To be taken concurrently with EDUC 5337.

#### EDUC-5370 Pedagogics: Secondary

The study and application to teaching and learning of middle grades and secondary school curriculum and methodology. Experiences in the university and the public schools are used to interpret, apply, and evaluate grade-specific teaching and learning practices. Planning and teaching through various modalities and techniques are researched and developed to enhance individual teaching and learning styles at either the middle grades or secondary level. (Offered every Fall).

#### EDUC-5671 Clinical Practice: Secondary

A supervised internship in secondary school sites where comprehensive practical experiences involving the school and community are provided. Students work with a team of professors, classroom teachers, and other school personnel to research, assess, and internalize the teaching-learning process. These teams rotate through a variety of settings in the secondary schools.

#### EDUC-5273 Graduate Intern Seminar: Secondary

This weekly seminar is designed to help interns prepare for and make sense of their classroom-based experiences. Interns engage in action research, develop an exit portfolio, examine student work through the use of protocols, and discuss professional readings. To be taken concurrently with EDUC 5773 or EDUC 5474.

## EDUC-5773 Advanced Clinical Practice: Secondary

An internship in secondary school sites where students assume full responsibility for teaching and classroom management in an independent, but supervised, experience for a full semester.

## EDUC-5474 Advanced Clinical Practice: Secondary

An internship in secondary school sites where students assume full responsibility for teaching and classroom management in an independent, but supervised, experience for a full semester. To be taken concurrently with EDUC 5337.

## EDUC-5387 Independent Study: Problems in Practice

This course will help students to link theories of school leadership with actual administrative practice during their last semester of the two-year program, while they are immersed in their internship. In solving real and simulated problems, students will have the opportunity to practice and refine skills that they have begun to develop. Problems will be aligned to NCATE standards that require field experience so that students can document their solutions as evidence in their portfolios.

## EDUC-5636 Clinical Practice in Special Education

Exploration of programming techniques appropriate for students with learning problems. Topics include interpretation of assessment as it relates to learning styles, individualization of instruction, classroom management, and interaction with teachers, administrators, and aides. Activities will include on-site observation and participation. Students will spend extended time in two different field placements.

## EDUC-5-99 Problems in Education

A conference course in education. The student pursues independent research in the area in which he/she is concentrating. Credit can vary according to work prescribed. May be taken more than once provided content differs. Prerequisite: Approval of advisor and instructor.

# Master of Education in School Leadership

## ELED-5390 Educational Leadership

Administrative theory as a means for directing attention to process and relationships. Organization of American public education. Principles and concepts of educational administration and leadership as related to the major administrative tasks. Knowledge of organizational patterns and administrative process, particularly as needed for the development and operation of special and compensatory education. Communication with the public. Examines

components of administration and boards of control. Planning as a prerequisite to the implementation of programs and changes.

### ELED-5391 School Management and Finance

This course deals with the basic management functions required for the successful organization and operation of schools and school districts. An overview of administrative responsibility as it relates to school personnel, students, facilities, and the general public is provided.

### ELED-5392 Leadership in Elementary and Secondary Schools

A study of administration of elementary and secondary schools with emphasis upon organizing techniques, program management, and student and parent involvement. Stress is upon skills needed by a principal for success at each level.

### ELED-5393 Research, Assessment, and Data-Driven Decision Making

This course focuses on statistical and research methods underlying psychological and educational research and analysis, and its application to understanding and utilizing the wealth of data available in schools regarding students, student performance, and trends of achievement over time in order to improve student achievement as well as the overall performance of the school.

### ELED-5394 Clinical Practice - Internship

This course focuses on the application of the knowledge, skills, and dispositions of a school leader in a diverse school-based setting. Structured learning activities, aligned to state and national standards, will comprise the applied portion of this course paired with reflective, analytical written entries of the experience which will be included in candidate's professional portfolio.

### ELED-5395 Instructional and Curricular Leadership

An examination of modern curricular programs and instructional methodologies, analyzing philosophical backgrounds, purposes, and implications for implementation in schools. Studies include a major look at instructional needs, practices, new programs of instruction, how these programs operate at the elementary and secondary school levels, and how they are influenced by national and state entities.

### ELED-5396 Problems in Administration

Students are required to do in-depth reading in a variety of areas, make field trips to observe model programs in school administration, and conduct field studies.



## ELED-6390 School Law and Policy Analysis

This class focuses on the laws, rules, structures and processes that define education in Texas and how to change them through analysis and argumentation. Students will: 1) explain the constitutional, statutory and organizational framework of the Texas public education system; 2) apply their understanding of school law in response to common demands made on school administrators by parents, students, school employees and other stakeholders; 3) analyze and develop arguments for changes in education policies and administrative structures, processes and programs; and 4) research school related court cases, statutes and administrative policies.

## ELED-6391 Advanced Problems in Administration

Problem solving and inductive inquiry themed to live and persistent problems of administrative practice through case study and simulation.

## ELED-6392 Supervision and Evaluation of Teaching

Emphasis is on supervision as a means to improve teaching by promoting reflection, action research, and enhanced staff development. Students review the research on teaching and examine philosophical and moral issues. Clinical supervision, portfolio development, and other evaluation techniques are developed and practiced.

## ELED-6393 Community Building and Civic Engagement

It is no longer sufficient for school leaders to solely focus on the operations of their school. They must interact with and form partnerships with the varying constituencies that impact their schools across the community, region and nation. This course will focus on the examination of these constituencies and will analyze successful school programs across the nation and beyond that leverage community and civic partnerships to add value to the educational experience for students and the success of the school in general.

## ELED-6693 Clinical Practice - Advanced Internship

Field work in school administration under the direction and supervision of both a public school administrator and a university staff member.

## ELED-6394 Systems Design & Implementation

This course is designed to introduce a variety of school design and redesign structures and processes to equip prospective principals with a diverse set of tools to use in school transformation work. Topics will include: design thinking, principles of strategic planning, systems thinking and system dynamics, research related to school turnaround, and developing an entrepreneurial stance regarding school system design and redesign.

## ELED-6395 Innovation in Teaching and Learning

This course is designed to engage school leadership candidates in an exploration of the current models of innovation that are most prevalent in the field of education. Topics may include: computer-mediated curriculum, blending learning, global education, "classrooms without walls", expeditionary learning, and other evolving educational models. Students will visit, in person or virtually, a variety of these models and analyze the strengths, challenges, and possible impact of the innovations in the maximizing of student learning.

## Master of Arts in School Psychology

### EPSY-5379 Psychological Assessment: Cognitive and Academic II

The second course in the series of addressing the assessment of student cognitive and academic functioning. Focus is on the analysis of data and conveying results in a meaningful report with relevant recommendations for the intended audience. Prerequisite: EDUC 5382 Psychological Assessment: Cognitive and Academic I

### EPSY-5380 Biosocial Basis of Behavior and Emotion

A critical study of disorders of thought, behavior, and emotions throughout the lifespan. The impact of both social and biological factors on abnormal development are examined. The taxonomies to classify emotional and behavioral disorders are presented.

### EPSY-5381 Human Development and Learning

A consideration of the major contribution of scientific research to an understanding of human development and learning. Emphasis on the biological, social, cultural, and psychological factors determining individual differences in children and adolescents. The major learning theories are studied in relation to their implications for teaching, and counseling and assessment.

### EPSY-5181 Human Development and Learning Lab

Practice in the application of human development and learning theories. The lab project addresses a selected case study's theoretical development stage and the construction of an intervention from learning theories. Monitoring, graphing, and development conclusions will be conducted throughout the semester. Must be taken in conjunction with EDUC 5381.

### EPSY-5382 Psychological Assessment: Cognitive and Academic I

The first in the two-course sequence in the assessment of cognitive and academic functioning. This course begins with a study of the theory of intelligence and achievement testing. Practice in administration, scoring, interpretation, and report writing using a variety of norm-referenced individual tests. Presentation of assessment strategies to assure reliable and valid appraisal of students from diverse cultural backgrounds.

## EPSY-5378 Ethics, Standards and Procedures in School Psychology

This course is the introductory course to the School Psychology Program. Students will acquire knowledge of school psychology professional roles, ethics, standards, laws, rules and regulations, and historical foundations of the profession. Students will engage in projects, class discussions, research and presentations to learn and apply foundational knowledge for the practice of school psychology. (Offered every Fall.)

## EPSY-5183 Cognitive Academic Assessment Lab

Practice in the administration and scoring of mental abilities tests. Course must be taken in conjunction with EDUC 5382.

## EPSY-5384 Behavior Management and Special Education

Study of behavior management systems that are based on psychodynamic, cognitive-behavioral, and developmental theoretical orientations. Specific intervention strategies are presented to reduce the behavioral and learning problems that interfere with achievement and psychosocial functioning.

## EPSY-5184 Behavior Management Intervention Lab

Supervised Lab on writing Individualized Education Plans (IEP) and Behavior Management Plans for students with learning and emotional problems. The plans are developed based on actual cases that the student will observe and test. This lab must be taken in conjunction with EDUC 5384.

## EPSY-5385 Research Methods I - Advanced Statistics

This course, the first in the graduate research methods sequence, covers major statistical procedures and their associated knowledge paradigms, including: 1) descriptive and correlational statistics; 2) inferential statistics; 3) nonparametric statistics; and 4) univariate and multivariate procedures.

## EPSY-5386 Psychological Assessment: Emotions and Personality

A study of test and interview-based assessment methods to assess psychosocial development. Focus on how diagnostic formulation is used to prepare comprehensive intervention plans. Intensive training in administration, scoring, and interpretation of projective personality tests. Must be taken in conjunction with EDUC 5187.

## EPSY-5187 Emotional/Personality Assessment Lab

This class consists of various exercises and activities designed to provide students with opportunities to practice scoring, formulate interpretive hypothesis, synthesize and integrate data from a variety of assessment measures, and prepare written reports. Must be taken in conjunction with EDUC 5386.

## EPSY-5388 Neuropsychological Assessment and Remediation

A study of brain-behavior relationships and neuropsychological-based learning disorders most commonly seen in youth. Administration, scoring, and interpretation of neuropsychological tests with emphasis on how to modify instruction to teach and counsel individuals with learning disabilities.

## EPSY-5389 Counseling Theory and Methods

Theories of counseling and psychotherapy are presented. Counseling methods and approaches are studied and demonstrated according to the major theoretical paradigms in Psychology. Multicultural issues are discussed in implementing counseling services in schools.

## EPSY-6378 Interventions and Multi-Tiered Systems of Support

The course covers a range of prevention and intervention strategies for children and adolescents to address academic and behavioral concerns in their developmental contexts such as family, peer, school and community. Students will learn to critically evaluate evidence based practices and techniques for assessing the effectiveness of interventions. In addition, students will review the basic academic instruction strategies for reading, math and writing and social emotional learning. Students will explore the role of the school psychologist in a multi-tiered system of support including assessment, consultation and direct intervention. (Offered every Fall.)

## EPSY-6380 Consultation Theory and Methods

The types of school and mental health consultation are presented. The role of the consultant at all phases of the consultation process is studied. Specific techniques for case, program, and consultee-centered consultation are discussed and simulated.

## EPSY-6381 Research Methods II: Design and Application

The second course in the sequence focuses on issues related to research methods for applied settings and the practice of making empirically-supported decisions related to underlying psychological and educational research. Topics addressed include: 1) the philosophy of science underlying research; 2) ethical issues in research, 3) challenges to internal and external validity; 4) research designs for applied settings; and 5) appropriate operations on different types of measurement scales.

## EPSY-6382 Group and Family Interventions

Current theories, methods, and applications of group and family interventions are studied. Recognition of the influence of small group dynamics and process on learning and communication are analyzed. Must be taken in conjunction with EDUC 6183.

## EPSY-6183 Interventions Lab

Practice in group and family interventions. Must be taken in conjunction with EPSY 5389.

## EPSY-6384 School Psychology Practice

Overview of the legal, ethical, and professional issues in the practice of school psychology. Examination of the role of the school psychologist in culturally and socially diverse educational and community organizations. Exploration of the interrelationship of the school psychologist to the campus student services personnel.

## EPSY-6385 Developmental Assessment: Infants and Young Children

Presentation of methods and theory in the developmental/psychoeducational assessment of infants and young children. Mastery of skills to administer and interpret psychological tests to identify cognitive, language, motor, adaptive, and socioemotional problems in the birth-5 age group (with an emphasis on children ages 3-5). Community/family/school collaboration and educational/behavioral interventions for young children will be discussed. Must be taken in conjunction with EDUC 6185.

## EPSY-6185 Developmental Assessment Lab

Practical experience in administering, scoring, and interpreting various instruments designed for the evaluation of cognitive, adaptive, social/ emotional, language, and motor skills of young children will be provided. Preparation of informative written reports that include appropriate recommendations for early childhood interventions will be emphasized. This lab must be taken in conjunction with EDUC 6385.

## EPSY-6386 Supervised Practicum-School Psychology

Required for certification and/or licensure. Consists of supervised experiences in appropriate institutions and/or agency settings. Credit may vary. Open to a limited number of qualified students in School Psychology. Practicum placement is in a multi-cultural setting.

## EPSY-6387 Educational Planning for the Exceptional Student

Seminar and applied practice based upon state and federal education laws and their implementation in the school setting. Includes principles and methods to write psychoeducational evaluation reports, treatment plans, and individualized education plans (IEP). Lecture, case study, and field assignment.

## EPSY-6388 Legal and Ethical Issues

Advanced Seminar and applied practice based upon state and federal regulations, compliance standards, and their implementation in the public school setting. Specific cases are utilized to study the legal and ethical requirements for professionals in education and specifically in school psychology. Collaboration with other professionals is

emphasized.

## EPSY-6389 Psychological Assessment II: Emotions And Personality Advanced

This course builds upon information and work in EDUC 5386 Psychological Assessment: Emotions and Personality and EDUC 5187 Emotional/Personality Laboratory. Graduate students participate in an advanced study and application of several instruments utilized to assess emotional functioning and personality characteristics in children and adolescents. Administration, scoring, and interpretation of these assessments are taught and applied in several cases. Recommendations for school and family settings are also included. (Offered every Fall.)

Prerequisites: EDUC 5386 and 5187

## EPSY-6390 Multicultural Issues in School Psychology

The course will provide students with the opportunity to develop a multicultural awareness as they explore the impact of an increasingly diverse society in the United States. Particular emphasis will be placed on gaining self-awareness around issues of cultural diversity. The course is designed to help professionals in educational settings (as well as other settings) have a knowledge base for working more effectively with children and adults of varying cultural backgrounds. Students will become familiar with race and ethnicity concepts, cultural identity, and issues surrounding a variety of other psychosocial and psychoeducational variables.

## EPSY-7380 School Psychology Internship: Part I

Supervised internship in the practice of school psychology. Experience provides opportunities for counseling, assessment, and consultation in school systems and community agencies.

## EPSY-7381 School Psychology Internship: Part II

Supervised internship in the practice of school psychology. Experience provides opportunities for counseling, assessment, and consultation in school systems and community agencies.

# English

## Faculty

[Victoria Aarons, Ph.D.](#) , Professor; O.R. & Eva Mitchell Distinguished Professor of Literature

[Peter H. Balbert, Ph.D.](#) , Professor

[Jenny Browne, M.F.A.](#) , Associate Professor

[Kelly Grey Carlisle, Ph.D.](#) , Associate Professor

[Duane Coltharp, Ph.D.](#) , Associate Professor; Associate Vice President for Academic Affairs

[Michael R. Fischer, Ph.D.](#) , Janet S. Dicke Professor of Public Humanities

[Coleen Grissom, Ph.D.](#) , Professor

[Andrew Kraebel, Ph.D.](#) , Assistant Professor

[Andrew Porter, M.F.A.](#) , Professor

[David Rando, Ph.D.](#) , Professor

[Willis Salomon, Ph.D.](#) , Associate Professor

[Kathryn Santos, Ph.D.](#) , Assistant Professor

[Michael Soto, Ph.D.](#) , Professor; Associate Vice President for Academic Affairs

[Claudia Stokes, Ph.D.](#) , Professor; Chair

[Betsy Winakur Tontiplaphol, Ph.D.](#) , Associate Professor

## Requirements

- [The Major](#)
- [The Minor](#)
- [The Minor in Creative Writing](#)
- [The Senior Thesis and Honors Program](#)

## The Major

The requirements for the degree of Bachelor of Arts with a major in English are as follows:

### I. Departmental requirements

A. Thirty-nine (39) hours in the Department of English

B. Lower-division requirements:

At least twelve (12) hours of lower-division courses including:

Three out of four historical survey courses:

ENGL 2301	British Literature: Old English to 1800
ENGL 2302	British Literature: 1800 to the Present
ENGL 2303	American Literature: Colonization to 1900
ENGL 2304	American Literature: 1900 to the Present
and	
ENGL 2311	Literary Methods

C. Additional requirements:

At least twenty-seven (27) hours of ENGL courses, including:

1. At least two (2) upper-division courses covering literary periods before 1800;  
Courses pre-1800 include: 3456, 3457, 3460, 3470, 4401, 4402, 4403, 4404, 4419, 4420, 4421, 4460.
2. At least two (2) upper-division courses covering literary periods after 1800;  
Courses post-1800 include: 3427, 3429, 3466, 3471, 3472, 3475, 3480, 3481, 3484, 4422, 4423, 4425, 4427.
3. At least three (3) additional elective ENGL courses, two (2) of which must be upper-division courses. Acceptable lower-division ENGL elective courses include the following: 2301, 2302, 2303, 2304, 2308, 2401, 2402, 2403. No more than one (1) of the three (3) elective courses may be in creative writing.

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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## The Minor

A minor in English consists of a minimum of twenty-one (21) credit hours of English, of which at least twelve (12) credit hours must be upper-division.

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# The Minor in Creative Writing

The minor in Creative Writing consists of a minimum of Twenty-one (21) credit hours from the following list of courses, with a maximum of two (2) courses in literature and with a maximum of two (2) courses in Communication.

ART 2468 Bookbinding

COMM 3340 Media Writing: Magazine Writing

COMM 3340 Media Writing: Scriptwriting

COMM 3340 Media Writing: Digital Journalism

COMM 3343 Print Communication

COMM 3-46 Video Communication: Narrative Video Production

COMM 3-46 Video Communicaton: The Video Essay

THTR 3360 Playwriting

THTR 4-92 Special Topics in Performance: Advanced Playwriting

ENGL 3401 Non-Fiction Writing

ENGL 3402 Fiction Writing

ENGL 3403 Poetry Writing

ENGL 3411 Advanced Non-Fiction Writing

ENGL 3412 Advanced Fiction Writing

ENGL 3413 Advanced Poetry Writing

ENGL 3-16 Writing Internship

ENGL 3-17 Experiential Learning in Editing and Publishing

ENGL 3-90 Directed Studies—Junior Level

ENGL 4-90 Directed Studies—Senior Level

ENGL 3427 Contemporary Literature\*

ENGL 3435 Rhetorical Analysis\*

ENGL 3475 Postmodern Literature\*

ENGL 4305 Topics in Creative Writing

ENGL 4423 Studies in American Literature: The American Short Story\*

GNED 2340 Creative Thinking and the Artistic Process

GRST 3311 Fairy Tales

ML&L 3350 Genres in Creative Writing

When departments offer a relevant “special topics” or “variable content” course, the Chair of the English Department may designate such a course as meeting a relevant requirement for the minor. ENGL 4305 may be taken and applied toward the minor more than once as long as the topic of the course varies.

\*This course is considered a literature course

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## The Senior Thesis and Honors Program

The senior thesis may be either a substantial piece of creative writing or an in-depth, original, analytical argument of approximately 40 pages, using primary and secondary research. The 6-hour thesis program (ENGL 4398 and 4399) may be chosen by any student with the consent of an appropriate instructor, and it is required of all students wishing to graduate with departmental Honors.

A student wishing to graduate with Honors in English must do all of the following:

- I. Maintain an overall grade point average of at least 3.33.
- II. Maintain a grade point average of at least 3.5 in English.
- III. Enroll in ENGL 4398 (in the first semester of the senior year) and 4399 (in the second semester of the senior year) with an appropriate faculty member who has approved the student’s project and has agreed to serve as the student’s thesis adviser.
- IV. Complete ENGL 4398 and 4399 with a grade of “A.”
- V. Declare his or her intention to be considered for Honors by submitting a written application to the chair of the department, along with a formal recommendation from the thesis adviser.
- VI. Submit a completed draft of the senior thesis to the thesis adviser and to a second faculty reader approved by the departmental Honors committee.
- VII. Submit the completed senior thesis to the departmental Honors committee, along with formal recommendations from the thesis adviser and second reader.
- VIII. Make an oral presentation of the senior thesis to the department.

After evaluating the quality of the senior thesis, the Honors committee will decide whether to confer or not to

confer departmental Honors.

A full description of the Honors program is available in the English department office.

## Courses

### ENGL-1302 Writing Workshop

A course in composition that stresses expressive, analytical and persuasive writing with emphasis on rhetorical strategies in relation to aims and audience. The course is designed to refine student skills in critical reading, analysis, and judgment.

### ENGL-1303 Intermediate Writing

Students who have exempted from ENGL 1302 with a score of 4 or 5 on the Language and Composition AP examination or a score of 5 on the Literature and Composition AP Examination but who wish to take 1302 may register for this section and attend a 1302 section after receiving the consent of the instructor. Students registered for 1303 will be expected to do work beyond the requirements of 1302. Prerequisite: consent of instructor.

### ENGL-2301 British Literature: Old English to 1800

An examination of the development of British Literature from its beginnings to 1800. (Offered every semester.)

### ENGL-2302 British Literature: 1800 to the Present

An examination of the literary expressions of cultural changes from 1800 to the present, with a primary concentration on British writers. (Offered every semester.)

### ENGL-2303 American Literature: Colonization to 1900

An examination in the literary expressions of cultural changes in America from the early explorers and colonists through the end of the nineteenth century. (Offered every semester.)

### ENGL-2304 American Literature: 1900 to the Present

An examination of the literary expressions of cultural changes in America from 1900 to the present. (Offered every semester.)

### ENGL-2305 World Literature

A course designed to complement the American and British Literature offerings. Includes, primarily, texts from European, Asian, African, and Central and South American cultures written in the past 2,000 years in all major genres.

### ENGL-2306 Advanced Placement I

Students entering with a score of 4 or higher on the Advanced Placement Literature and Composition examination or a 6 on the Higher-Level International Baccalaureate English exam will receive credit for this course.

### ENGL-2307 Advanced Placement II

Students entering with a score of 5 on the Literature and Composition examination or a 7 on the Higher-Level International Baccalaureate English exam will receive credit for this course. These credits are in addition to the credits received for ENGL 2306, for a total of 6 credits.

### ENGL-2308 The Literary Imagination

This course introduces students to a variety of topics in the study of literature. Individual offerings emphasize historical, thematic, or genre approaches to reading and writing about literary texts (consult appropriate Class Schedule for details). Prerequisite: First- or Second-year status is required, or consent of instructor.

### ENGL-2311 Literary Methods

Introduction to the practice of literary studies. Special attention will be paid to evaluating and interpreting both primary literature (in its major genres) and a variety of secondary critical arguments. Frequent writing assignments will include major essay that demonstrates an awareness of important critical work on the subject. Topics vary.

### ENGL-2315 Advanced Writing for the Professions

An introductory writing course designed to provide students with the skills, knowledge, and techniques necessary for them to write clearly and effectively in professional settings. This course is open to students from all majors and programs.

### ENGL-2340 Creative Thinking and the Artistic Process

This course encourages students to synthesize a theoretical and experiential approach to the creative process as studied through the visual arts, music, creative writing, and theatre. Students enter into the creative process as a means to develop creative self-expression, aesthetic sensibility, and an understanding of the arts. The nature and drive of artistic endeavor is explored through studies of the lives of significant thinkers and artists, examinations of art works, guest lectures, and projects. Students will engage in activities and projects that will enable them to access and develop their own creative thinking skills in concert with traditional, analytic modes. (Also listed as ART 2314, THTR 2340, GNED 2340 and MUSC 2340.)

## ENGL-2373 African American Literature

Survey of African American literature from the early slave narrative to the present. Examines the history, culture, and intellectual traditions informing this literature, as well as the political and aesthetic debates that shaped the tradition.

## ENGL-2401 Introduction to Non-Fiction Writing

Study in the theory, technique, and practice of non-fiction writing.

## ENGL-2402 Fiction Writing

Study in the forms of fiction with a primary focus on writing the short story.

## ENGL-2403 Poetry Writing

Study of the theory, techniques, and practice of poetry writing.

## ENGL-3304 Writing Tutors/Writing Workshop

Writing tutors assigned by permission of instructor to individual sections of ENGL 1302. At the discretion of the instructor, tutors assist students in the process of producing written essays. Office hours and class attendance required. Prerequisite: consent of instructor.

## ENGL-3414 Advanced Exposition and Argument

Intensive writing workshop concentrating on individual projects and focusing on the traditional rhetorical principles of invention, structure, and style. (Offered every Spring). Prerequisite: at least one ENGL course at the 2000-level or higher

## ENGL-3-16 Writing Internship

Supervised work on individually specified projects under the supervision of departmental faculty. Each project involves work on literary publications. The number of internships varies with available opportunities. Pass/Fail only.

## ENGL-3-17 Experiential Learning in Editing and Publishing

Directed consideration of issues in literary and scholarly publishing, including acquisitions, editing, production, indexing, or design. Student will work with a faculty member on the production of a monograph, collection, or journal issue. (Offered every semester)

## ENGL-3427 Contemporary Literature

Selected studies in contemporary literature in English and English translation. May be repeated for up to 8 hours when topics vary. (Offered every semester).

## ENGL-3429 Jewish Literature

A survey of major Jewish literary figures, including Kafka, Babel, I.B. Singer, Sholem Aleichem, Philip Roth, Bellow, Malamud, Paley, and Wiesel, in response to Jewish literary and cultural traditions, rooted in Hebrew scripture. Prerequisite: At least one ENGL course at the 2000 level or higher

## ENGL-3335 Rhetorical Analysis

Introduction to rhetoric as a mode of analysis as it applies to discursive modes and genres. (Also listed as HCOM 3352) Prerequisite: At least 1 ENGL course at the 2000 level or higher.

## ENGL-3440 Nineteenth-Century British Literary Culture

A study of nineteenth-century British literature within particular cultural and historical contexts. Subjects may include the city, medicine, visual arts, and performance history. This course counts toward the Interdisciplinary Cluster "The Spirit of Our Age: Nineteenth Century Science and Culture." (Offered every other year). Prerequisite: at least one ENGL course at the 2000-level or higher

## ENGL-3441 Nineteenth-Century American Literary Culture

A study of nineteenth-century American literature within particular cultural and historical contexts. Subjects may include religion, gender, class, and race. This course counts toward the Interdisciplinary Cluster "The Spirit of Our Age: Nineteenth Century Science and Culture." (Offered every other year). Prerequisite: at least one ENGL course at the 2000-level or higher.

## ENGL-3346 History of the English Language

Traces the history of modern English varieties of language from their common Indo-European origin. Emphasis upon the relation between cultural changes and changes in English vocabulary, grammar, pronunciation, and spelling. Prerequisite: at least one ENGL course at the 2000-level or higher.

## ENGL-3452 American Literary Sentimentalism

A study of nineteenth-century American literary sentimentalism, with a particular focus on the movement's constitution of gender, power, and race. We will read such major bestselling novels as Harriet Beecher Stowe's *Uncle Tom's Cabin* and will also consider the impact of sentimentalism on other forms such as lyric poetry and the slave narrative. (Offered every other year). Prerequisite: At least one ENGL course at the 2000 level or higher.

## ENGL-3456 The Epic Legacy: Imagining Antiquity in The Middle Ages

This course surveys the legacy of classical epic, especially the matter of Troy and Thebes, in medieval literature. Major themes include the relationship between epic and romance, the status of the vernacular (especially English) relative to Latin, the status of pagan religion and philosophy in the hands of medieval (Christian) writers, and the place of women in these imagined antique worlds. (Offered every other year). Prerequisite: At least one ENGL course at the 2000 level or higher.

## ENGL-3457 Medieval Christian Mysticism

A survey of writings in the tradition of medieval Christian mysticism, from Augustine (d. 430) to John of the Cross (d. 1591). Major themes include the use of violent and erotic imagery, the move from Latin to vernacular languages like English, German, Spanish, and French, the importance of gender (whether the author's or the audience's) in the shaping of this literature, and the relevance of medieval mysticism to modern thought. (Also listed as RELI 3458) Prerequisite: At least one English course at the 2000 level or higher.

## ENGL-3460 Introduction to Shakespeare

An introduction to Shakespeare's plays and poetry with special attention to genre and the historical and cultural contexts that produced them. (Offered every year). Prerequisite: At least one ENGL course at the 2000 level or higher.

## ENGL-3465 19th-Century British Poetry

This course examines the poetry of nineteenth-century Britain, emphasizing the major authors and trends associated with the Romantic and/or Victorian eras. Course readings may be themed or selected according to another constraint (e.g. the sonnet, Pre-Raphaelitism, etc.); students may repeat the course as topics vary. (Offered every year). Prerequisite: at least one ENGL course at the 2000 level or higher.

## ENGL-3466 19th-Century British Fiction

This course examines the fiction of nineteenth-century Britain, emphasizing the major authors and trends associated with the Romantic and/or Victorian eras. Course readings may be thematically-linked or selected according to another constraint (e.g. historical fiction, women writers, etc.); students may repeat the course as topics vary. Prerequisite: at least one ENGL course at the 2000 level or higher.

## ENGL-3470 Early American Literature

Examines the literature of the colonies and early republic, up to 1830. Considers literature in the light of Puritan and Enlightenment attempts to build a nation as well as the social conflicts that undermined those projects. Prerequisite: ENGL 2303 or consent of instructor.

## ENGL-3471 American Literature of the Nineteenth Century

Study of particular periods, literary movements, authors, themes, or genres of nineteenth century American literature. Students may repeat the course as topics vary. Prerequisite: At least one ENGL course at the 2000 level or higher.

## ENGL-3372 American Literature, 1900 - Present

Studies in major American writers and literary movements. May be repeated when topics vary. Prerequisite: ENGL 2304 or consent of instructor.

## ENGL-3473 The Jewish Graphic Novel

A Study of the Jewish graphic novel focusing on the developing history of the genre of the graphic novel and the intersection of visual and textual narratives. The readings will be informed by a diversity of theoretical perspectives, including visual culture studies and the graphic novel as cultural product and practice. (Offered every other year). Prerequisite: At least one ENGL course at the 2000 level or higher or consent of instructor.

## ENGL-3475 Postmodern Literature

Major authors and issues involved with the postmodern aesthetic. (Offered every other year). Prerequisite: At least one ENGL course at the 2000 level or higher.

## ENGL-3480 The Modern Novel

This course examines the development of the British and American novel after 1900, with an emphasis on how the works reflect the changing concepts of time, space, and personality. Topics include literary experimentation, Freudian theory, The Great War, stream of consciousness, American expatriation, selfhood, solipsism, and sexual aesthetics. Prerequisite: At least one ENGL course at the 2000 level or higher.

## ENGL-3381 Modern Poetry

Examines the major figures and movements of poetry written in English during the twentieth and twenty-first centuries. Prerequisite: ENGL 2302, 2304, or consent of instructor.

## ENGL-3484 The American Novel

This course examines the formal and thematic development of the American novel from the early national period to the present, focusing on the evolution of American readers, the novel's engagement with historical controversy and pressing social issues, and the changing place of literary print culture in relation to wider shifts in technology. Prerequisite: At least one ENGL course at the 2000 level or higher.



## ENGL-3385 The Continental Novel

Study of a selection of novels in translation from French, Russian, and German literatures. Includes Balzac, Hugo, Dostoevsky, Koestler, Hesse, and Boll. Prerequisite: ENGL 2302, 2304, 2305 or consent of instructor.

## ENGL-3-90 Directed Studies - Junior Level

Independent Study. Discretion of Instructor. Prerequisite: consent of instructor.

## ENGL-4401 Geoffrey Chaucer

Examines the work of Geoffrey Chaucer. Texts may include the Canterbury Tales, Troilus and Criseyde, or other works. (Offered every year). Prerequisite: At least one ENGL course at the 2000 level or higher.

## ENGL-4402 Shakespeare

An introduction to Shakespeare's plays with special attention to genre, periodization, and topical issues that situate Shakespeare's plays within their cultural context. Topics will vary and the course may be repeated for up to six hours of credit when topics vary. Prerequisite: At least one ENGL course at the 2000 level or higher.

## ENGL-4403 Milton

Examines Milton's major poetry and prose in historical, theological, and political contexts. (Offered every other year). Prerequisite: At least one ENGL course at the 2000 level or higher.

## ENGL-4304 Restoration Drama

Examines English drama from 1660 to 1800. Covers heroic drama, tragedy, comedy, and satire. Prerequisite: ENGL 2301 or consent of instructor.

## ENGL-4405 Topics in Creative Writing

Extensive writing in a specific form or genre. Maybe repeated once when topics vary. (Offered every year).

## ENGL-4411 Advanced Writing of Creative Nonfiction

Extensive writing in forms and techniques of creative nonfiction (memoir, travel writing, nature writing, etc.). Courses alternate by semester between memoir/personal essay and more research-driven work. May be repeated for up to 6 hours of credit when topic vary. Prerequisite: ENGL 2401 or consent of Instructor

## ENGL-4412 Advanced Fiction Writing

Extensive writing in forms and techniques of fiction. May be repeated for up to 6 hours credit with the permission of instructor. Prerequisite: ENGL 2402 or consent of instructor.

### ENGL-4413 Advanced Poetry Writing

Extensive writing in forms and techniques of poetry. May be repeated for up to 8 hours credit with permission of instructor. Prerequisite: ENGL 2403 or consent of instructor.

### ENGL-4417 Seminar in Literary Methods

Literary works from more than one historical period examined in relation to a selected thematic or generic topic. May be repeated when topics vary; if appropriate, may count toward a distribution requirement (in which case it does not count as an elective). (Offered occasionally) Prerequisite: at least one ENGL course at the 2000 level or higher.

### ENGL-4418 Seminar in Literary Theme Or Genre

Literary works from more than one historical period examined in relation to a selected thematic or generic topic. May be repeated when topics vary; if appropriate, may count toward a distribution requirement (in which case it does not count as an elective). (Offered every other year).

### ENGL-4419 Studies in Medieval Literature

Selected topics concerning the intersection of literature and culture in medieval England in the context of current critical theory and debate. Topics vary, including selected topics, genres, and cultural issues of Anglo-Saxon and Late Medieval English Literatures. May be repeated when topics vary. Prerequisite: At least one ENGL course at the 2000 level or higher.

### ENGL-4420 Studies in Early Modern British Literature

Selected topics concerning the intersection of literature and culture in sixteenth and earlier seventeenth-century England in the context of current critical theory and debate. May be repeated when topics vary. (Offered occasionally). Prerequisite: At least one ENGL course at the 2000 level or higher.

### ENGL-4421 Studies in Restoration and Eighteenth- Century British Literature

A study of selected topics in the literature and culture of Restoration and eighteenth-century Britain in the context of current critical theory and debate. May be repeated when topics vary. (Offered every year). Prerequisite: at least one ENGL course at the 2000 level or higher.

### ENGL-4422 Studies in 19th-Century British Literature

This course examines special selections of nineteenth-century British literature, with an emphasis on particular genre-crossing themes (e.g. Orientalism) and/or less frequently studied single genres (e.g. non-fiction). Students may repeat the course as topics vary. Prerequisite: At least one ENGL course at the 2000 level or higher.

### ENGL-4423 Studies in American Literature

Course examines selected topics, genres, and cultural issues of American literature. Includes the Harlem Renaissance; Theory and Practice of American Gothic; The American Short Story. May be repeated when topics vary. Prerequisite: At least one ENGL course at the 2000 level or higher.

### ENGL-4425 Seminars in Literary Periods

Examines issues and authors within their specific historical periods. May be repeated when topics vary. (Offered every year). Prerequisite: At least one ENGL course at the 2000 level or higher.

### ENGL-4426 Seminar on Individual Authors

In-depth study of one or more major figures. May be repeated when authors vary. (Offered every year). Prerequisites: At least one ENGL course at the 2000 level or higher or consent of instructor.

### ENGL-4427 Literature of the Holocaust

Examines cultural, generational, and literary perspectives of the Holocaust.

### ENGL-4330 Studies in Literary and Cultural Theory

Selected topics and issues in contemporary theory, examining major texts of feminism, new historicism, marxism, deconstructionism, psychoanalysis, and literary canons and traditions. May be repeated when topics vary. Prerequisite: ENGL 2311 or consent of instructor.

### ENGL-4440 Digital Approaches to English Literature

Digital technologies provide new opportunities for literary studies, allowing scholars to mine texts and advance quantitative claims that would otherwise be impossible to support, to present texts in creative new formats, and to access, organize, and process archival material dispersed around the world. This course will introduce students to some of these possibilities and equip them to use a digital skillset in their study of the humanities. We will survey and assess the current state of the field of the digital humanities, learn some of the skills needed to undertake work in this field, and use those skills to create major digital projects. (Offered every year.) Prerequisites: At least one ENGL course at the 2000 level or higher.

### ENGL-4-90 Directed Studies - Senior Level

Independent study. Discretion of instructor. Prerequisite: consent of instructor

### ENGL-4398 Senior Thesis I

Individual research and scholarly investigation under faculty supervision leading to the preparation of a Senior Thesis. To be taken only by Senior Honors students in the first semester of their senior year. Prerequisite: Consent of instructor.

### ENGL-4399 Senior Thesis II

Individual research and scholarly investigation under faculty supervision leading to the preparation of a Senior Thesis. To be taken only by students in the second semester of their senior year. This course fulfills the Senior Experience requirement of the University's Common Curriculum. Prerequisite: ENGL 4398

# Engineering Science

## Faculty

[Farzan Aminian, Ph.D.](#) , Professor; Chair

[Peter Kelly-Zion, Ph.D.](#) , Professor

[Jack Leifer, Ph.D.](#) , Associate Professor

[Kevin Nickels, Ph.D.](#) , Associate Professor

[Dany Munoz Pinto, Ph.D.](#) , Assistant Professor

[Joshua D. Schwartz, Ph.D.](#) , Associate Professor

[Wilson Terrell Jr., Ph.D.](#) , Associate Professor

[Mahbub Uddin, Ph.D.](#) , Professor

Deryck Young , Visiting Assistant Professor

## Overview

## Mission

The mission of the Engineering Science Department at Trinity University is to provide students with a broad-based undergraduate engineering education by offering a design-oriented, multi-disciplinary engineering science curriculum in the context of the University's traditions of the liberal arts and sciences.

## Objectives

The Engineering Science Department graduates are expected to attain the following objectives within a few years after graduation:

1. Successful practice of engineering design and analysis in their field;
2. Application of a broad background in liberal arts and sciences when solving engineering problems with humanistic dimensions in their professional practice;
3. Advancement in their engineering careers with increased responsibility and leadership roles;
4. Effective oral and written communication with diverse groups of people;
5. The pursuit of continuing or advanced education relevant to professional interests.

The curriculum emphasizes an in-depth understanding of the fundamentals of the physical sciences, mathematics, and engineering science that form the foundation for technical work in all fields of engineering. Some

specialization is available through elective courses in Chemical, Electrical, and Mechanical Engineering, taken during the junior and senior years. The program provides significant hands-on experience in engineering laboratories and participation in engineering design projects throughout the eight-semester engineering design course sequence. The emphasis on fundamentals is intended to prepare students for dealing with the rapid pace of technological change and the interdisciplinary demands of today's, and tomorrow's, engineering practice. The laboratory and design portions of the program provide the student with a balanced perspective of the realities and limitations required for practical problem solving. The professional practice of engineering requires skill and resourcefulness in applying science and technology to the solution of problems in our complex technological society. The successful engineer must possess a thorough understanding of social and economic forces and have an appreciation of cultural and humanistic traditions. The Trinity Engineering Science Program encourages the development of this kind of graduate by providing a broad technical background and a significant liberal education in the humanities and social sciences.

## Accreditation

Trinity's undergraduate Engineering Science Program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

## Requirements

- [Admission to the Engineering Science Major](#)
- [Bachelor of Science in Engineering Science Degree](#)
- [Four-year class schedule](#)
- [Prerequisite Requirement](#)

## Admission to the Engineering Science Major

I. Students will normally apply for acceptance to the Engineering Science major during the second semester of their sophomore year. Those students who do not apply in this period, but do apply later, will be handled as transfers. The transfer criteria for acceptance are consistent with those listed below, and they generally apply to all courses taken up to the time of application.

II. For full acceptance a student must ordinarily satisfy the following requirements:

A. Completion of MATH 1311, 1312, and 2321 with an average of 2.0 or better.

B. Completion of PHYS 1311, 1111, 1312, 1112 and CHEM 1318 and 1118 with a minimum grade of C- in each course and an average of 2.0 or better.

C. Completion of ENGR 1381, 1382, 1313, 2314, 2320/2120, and 2181 with a minimum grade of C- in each course and an average of 2.0 or better.

D. A grade of C or better in ENGR 1313, 2314, 2320/2120 (No more than 4 credits taken at another institution after matriculation at Trinity may be used to satisfy this requirement).

E. Approval by the Chair of the Department.

III. Provisional acceptance may be granted to applicants with no more than two grades of C- in the courses listed in 2d.

IV. After completing ENGR 2311, 2364/2164, 3355/3155, and 3327, the progress of provisional students will be reviewed. Upon recommendation of the faculty advisor and approval by the Chair of the Department, full acceptance will be granted.

V. Requests for exceptions to this policy will be considered by the Chair of the Department.

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## Bachelor of Science in Engineering Science Degree

Engineering students normally follow programs of study specifically tailored to long term career objectives. Each program is composed of a combination of required and elective courses. The electives are chosen through required consultation with the engineering science adviser.

Requirements for the Bachelor of Science in Engineering Science degree are as follows:

I. Engineering Science departmental requirements:

A. ENGR 1313, 1381, 1382, 2181, 2182, 2309, 2311, 2314, 2320/2120, 2364/2164, 3181, 3182, 3323/3123, 3327, 3355/3155, 4326/4126, 4341, 4381, and 4382, totaling 54 credit hours.

B. MATH 1311, 1312, 2321, 3316, 3320, 3357; PHYS 1311/1111 and 1312/1112; CHEM 1318/1118 and a basic science or math elective (any course in biology or geosciences or a 2000 level course or higher in mathematics, physics, or chemistry) for a total of at least 33 credit hours.

C. CSCI 1312 or an equivalent course approved by the department chair.

II. Electives necessary to bring the total credit hours earned for the degree to 129.

## Four-year class schedule

The suggested arrangement of courses for a four-year program leading to the degree of Bachelor of Science in Engineering Science should be determined in conference with the student's adviser. The recommended first-year program is shown below.

### First Year

Fall Semester	Credit Hours
ENGR 1381	3
MATH 1311	3
PHYS 1311	3
PHYS 1111	1
First-Year Experience	6
<b>Total</b>	<b>16</b>

Spring Semester	Credit Hours
ENGR 1382	3
ENGR 1313	3
MATH 1312	3
PHYS 1312	3
PHYS 1112	1
Pathways	3
<b>Total</b>	<b>16</b>

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## Prerequisite Requirement

The Engineering Science Department enforces the University's policy on prerequisites.



# Courses

## ENGR-1313 Mechanics I

Forces and couples acting on rigid bodies in equilibrium using vector analysis including equivalent force systems, free body diagrams, truss analysis, friction, centroids, and moments of inertia. Prerequisites: MATH 1311 and PHYS 1311.

## ENGR-1381 Engineering Analysis & Design I

Introduces students to the engineering design process utilizing a competitive design project. Small groups of students conceive, design, build, and test a structure or device to best achieve specified performance criteria under realistic constraints. Emphasis is placed on Computer Aided Design (CAD). Supporting topics include sketching, construction and testing techniques, measurement concepts, data analysis, communication, and time management.

## ENGR-1382 Engineering Analysis & Design II

Continues the introduction to engineering design with another interactive team-oriented design project. Emphasis is placed on numerical analysis using computational software. Supporting topics include programming mathematical models of physical systems, and data gathering, analysis, and presentation. Consideration of alternate and past solutions. Prerequisite: ENGR 1381.

## ENGR-2181 Engineering Design III

Continues the development of students' design skills through a project emphasizing constraints including: ethics, health and safety, manufacturability, sustainability, economics, the environment, and social and political issues. Supporting topics include project management, literature search and communication skills. Oral and written reports are required. Prerequisite: Sophomore Standing

## ENGR-2182 Engineering Design IV

Continuation of ENGR 2181: final design, construction, testing, and evaluation. Engineering economics and life-cycle costs are introduced in support of the project. Multimedia presentations are required. Prerequisite: ENGR 2181.

## ENGR-2309 Professional Practice

This is a course designed for future professionals whose fields involve a technological component including aspiring engineers, scientists, managers, and others in technology-oriented fields. This course explores topics of enduring significance and with humanistic dimensions, specifically targeting future professionals whose fields

involve a technological component. The course prepares students for making ethically and financially informed decisions in the workplace environment. Topics include: finance for professionals; the ethical dimensions of professional practice; industrial workplace safety; and contemporary issues in technological fields. Prerequisite: At least Sophomore standing

### ENGR-2311 Mass and Energy Balances

Conservation of Mass and Energy concepts applied to open and closed systems with and without chemical reactions. Phase equilibria. (Offered every year). Prerequisites: Sophomore Standing

### ENGR-2314 Mechanics II

Accelerated rigid body motion including kinematics and kinetics of particles and bodies, work and energy, linear and angular impulse and momentum, and vibrations. Prerequisite: ENGR 1313 Corequisite: MATH 1312

### ENGR-2320 Electric Circuits

An introduction to the techniques of analysis and design of elementary linear electric circuits. Topics include mesh, node and equivalent circuit analyses, DC resistive circuits, operational amplifiers, modeling of RLC circuits using differential equations, transient responses and AC steady state. Prerequisite: MATH 1312 Corequisite: ENGR 2120.

### ENGR-2120 Electric Circuits Laboratory

Laboratory course accompanying ENGR 2320. An introduction to the measurement of voltage and current, uses of simulation and experimentation for analysis and design, and the design of elementary electric circuits. The writing of technical reports and the interpretation and documentation of experimental results is emphasized. Corequisite: ENGR 2320.

### ENGR-2359 Fundamentals of Environmental Engineering

Engineering analysis and design of treatment processes for industrial pollution of air, water, and soil. Topics include contaminants, their sources, and cleanup. Economic and legal consideration. (Offered every other year). Prerequisite: CHEM 1318 and Sophomore standing.

### ENGR-2364 Electronics I

An introduction to the techniques of analysis, design, and understanding of elementary electronic devices and circuits. Modeling of linear and non-linear electronic devices and systems such as diodes, bipolar junction, and field effect transistors, operational amplifiers, and digital logic devices. Analysis and design of circuits using device and system models. An introduction to digital logic, including analysis and design techniques. Prerequisite: ENGR 2320. Corequisite: ENGR 2164.

## ENGR-2164 Electronics I Laboratory

Laboratory course accompanying ENGR 2364. A continuation of the topics in ENGR 2120, with emphasis on electronic devices and systems. Experiments and design projects employing diodes, transistors, operational amplifiers, and combinational and sequential digital logic. Corequisite: ENGR 2364.

## ENGR-3181 Engineering Design V

Builds on the students' background in electrical engineering with emphasis on the design of digital logic based systems. Supporting topics include combinatorial and sequential circuits, programmable logic, finite state machines, microprocessor-based systems, introductory programming, and functional block diagrams. (Offered every year). Prerequisites: ENGR 2364 and 2164.

## ENGR-3182 Engineering Design VI

Builds on the students' background in thermodynamics/fluids with the introduction of a competitive thermal-fluids design project. Supporting topics include thermal-fluids instrumentation and measurements; and computerized data acquisition, analysis, and visualization. Application of uncertainty analysis and design of experiments. Oral and written reports and design journals are required. Prerequisite: MATH 3320 Corequisites: ENGR 3323 and 3123.

## ENGR-3321 Signals and Systems

The analysis of signals and linear systems in the time and frequency domains using transform methods. Topics include: methods of modeling signals and systems, convolution, frequency response, impulse response, the Fourier and Laplace transforms, and transfer functions as applied to circuits and general linear systems. Prerequisites: ENGR 2320 and MATH 3316.

## ENGR-3121 Signals and Systems Laboratory

Laboratory to accompany ENGR 3321. A mix of experiments and short design projects intended to motivate, illustrate, and apply concepts from ENGR 3321. Modern methods of simulation and computer-aided design of linear systems are introduced. Corequisite: ENGR 3321.

## ENGR-3323 Fluid Mechanics I

An introduction to the fundamentals of fluid mechanics, including hydrostatics, conservation of mass, momentum, and energy for a control volume, dimensional analysis and similarity, flow measurement, and pipe flow. Prerequisites: ENGR 3327 and 2314. Corequisites: ENGR 3123 and MATH 3357.

## ENGR-3123 Fluid Mechanics I Laboratory

Experimental investigations in fluid mechanics including instrumentation and measurements, analysis, design, and

reporting of results. Corequisite: ENGR 3323

## ENGR-3327 Thermodynamics I

Basic principles of macroscopic thermodynamics including pressure-volume-temperature relationship of pure substances, work, heat, first and second laws of thermodynamics, entropy and the degradation of energy, thermodynamic system analysis, computer-aided design, and analysis of simple power and refrigeration systems. Prerequisites: ENGR 2311

## ENGR-3339 Mechanics of Materials

Stresses and deflections of structural elements including stress strain relations, Mohr's circle, tie rods, columns, beams, torque tubes, and statically indeterminate systems for both elastic and plastic stress levels. Prerequisite: ENGR 1313.

## ENGR-3355 Control Systems

Techniques of modeling and analyzing mechanical and electrical systems, linear systems including feedback control systems, solutions to system differential equations using classical techniques, both analytical using the Laplace transform, and numerical methods; transfer functions, transient and steady-state response, stability, and frequency response. Prerequisites: ENGR 2320, MATH 3316. Corequisite: ENGR 3155.

## ENGR-3155 Control Systems Laboratory

Experimental observation of the behavior of physical systems and comparison with the mathematical models. Construction and analysis of simple control systems with examples taken from the thermal, fluid, mechanical, and electrical sciences. Corequisite: ENGR 3355.

## ENGR-4326 Heat Transfer

A study of conduction, convection, and radiation separately and in combination; steady and unsteady states; analytical and numerical methods including explicit and implicit finite differences. Prerequisites: ENGR 3323, MATH 3357. Corequisites: ENGR 4126.

## ENGR-4126 Heat Transfer Laboratory

Experimental investigations in heat transfer including instrumentation and measurements, analysis, design, and reporting of results. (Offered every year). Corequisite: ENGR 4326.

## ENGR-4328 High-Frequency Electromagnetics

The fundamental theory of electromagnetic waves is developed and applied to the design of high-frequency electrical circuits. Topics include: how electromagnetic waves travel and are usefully directed; how to design signal transmission lines, filters and couplers; analysis of high-frequency circuit networks, and high-frequency circuit concepts such as distributed impedance. Students will also prepare an individually researched assignment on a subject of their choice exploring an emerging technology in the electrical engineering area. (Also listed as PHYS 4328) Prerequisite: MATH 2321 and either ENGR 2320 or PHYS 2131.

### ENGR-4341 Engineering Materials

Principles underlying the structure-property-application relationships of various engineering materials including metals, ceramics, glasses, polymers, composites, semiconductors, and superconductors. Analysis of material microstructures with respect to thermal, mechanical, electrical, optical, magnetic, and chemical properties. The role of material selection in engineering design. Laboratory work includes material testing, uses of x-ray diffractometer and the electron scanning microscope. Supplemental of x-ray diffractometer and the electron scanning microscope. Supplemental movies on advances in engineering materials. Individual project.

### ENGR-4342 Bioengineering Science

Structure, function, and modeling of transport systems in the human body with emphasis on cardiovascular, pulmonary, and related systems. Mathematical modeling and system responses to environmental changes. Homeostasis and control systems. Prerequisites: CHEM 1318 and MATH 1311.

### ENGR-4356 Modern Control System Design

Selected topics from the broad range of modern methods of control system analysis and design, such as: state-space and modern transfer function models and methods; discrete-time and/or nonlinear systems; multivariable systems; computer-aided control system design.

### ENGR-4357 Chemical Reaction Engineering

Chemical reaction kinetics and its relationship to the design and scale-up of chemical reactors. Mathematical analysis of batch, mixed flow and plug flow reactors, advanced topics including multireaction analysis, heat and mass transfer in chemical reactors and catalytic reactors. Computer simulation. Prerequisites: ENGR 2311

### ENGR-4358 Biochemical Engineering

The fundamentals of analysis and design of bioprocesses. Topics include enzyme kinetics, immobilized enzyme reactors, cell cultivation, growth kinetics, and bioreactor design. Prerequisite: ENGR 2311.

### ENGR-4365 Digital Logic Design

A comprehensive study of digital logic design and analysis techniques for combinational and sequential circuits.

Small-scale and medium scale integrated circuits as well as several varieties of programmable logic are used as design components. Includes a case study of complex sequential circuit such as a microprocessor.

### ENGR-4165 Digital Logic Design Laboratory

Laboratory to accompany ENGR 4365. A series of short design projects intended to motivate, illustrate, and apply design techniques taught in ENGR 4365. Projects are implemented using various programmable logic devices. Corequisite: ENGR 4365.

### ENGR-4366 Unit Operations

Mass transfer in multi-component systems and its relationship to fluid mechanics and heat transfer. Techniques of design of transfer operations including distillation, gas absorption, liquid extraction and cooling towers. Computer aided design and simulation. Prerequisite: ENGR 2311

### ENGR-4367 Mechatronics

This course surveys topics underlying the design of mechatronic systems such as electronics, system modeling and control, and computer control systems. Components supporting system design such as sensors, actuators, and data acquisitions are also covered. Case studies of mechatronic systems, including discussion of tradeoffs between mechanical, electrical, electronic, and microcomputer control, are studied. A final project involving the design and implementation of a mechatronic system puts these principles into practice. Prerequisites: ENGR 2314, 2364, and 3355.

### ENGR-4369 Embedded Microcomputer Systems

Study of microprocessor and microcontroller systems: hardware, including basic system architectures, processors, memory, and peripheral devices; software, including assembly language programming; and system design, including electrical and mechanical applications. Hands-on experience in a typical development environment, including interfacing and programming. Includes a case study of a typical embedded system.

### ENGR-4370 Mechanics of Continuous Media

Mechanics of solids including elasticity, plasticity, advanced strength of materials, energy methods, experimental stress analysis, and an introduction to the finite element method. Prerequisite: ENGR 3339.

### ENGR-4371 Machine Design

Topics chosen from among static and fatigue theories of failure, fracture, probabilistic design, shafts and shaft components, springs, welded and bolted connections, and gear design. Prerequisite: ENGR 3339

## ENGR-4372 Computational Methods in Engineering

Application of contemporary numerical methods to problems in chemical, electrical and mechanical engineering. Formulation of governing differential equations, weighted residuals, finite-difference, and control volume finite-element methods. Prerequisite: MATH 3316

## ENGR-4373 Thermal/Fluid Applications

This course covers advanced topics in fluid mechanics, heat transfer, and thermodynamics. Applications in which the interdependence of these fields is critical to the understanding of engineering systems will be emphasized. Prerequisite: ENGR 3327.

## ENGR-4375 Structural Dynamics

Free and forced vibrations of single and multiple degree of freedom systems with and without damping, structural response to dynamic loads, eigenvalue problems, energy methods, differential equation methods, forcing functions, and numerical analysis. Prerequisites: ENGR 2314 and MATH 3316

## ENGR-4377 Electronics II

Analysis and design of digital electronic circuits using MOS transistors; analysis and design and operational amplifiers; feedback amplifiers and frequency response of amplifiers. Prerequisite: ENGR 2364.

## ENGR-4177 Electronics II Laboratory

Laboratory to accompany ENGR 4377. Computer-aided design of integrated circuits and verification of design using simulation and/or laboratory experimentation. Corequisite: ENGR 4377.

## ENGR-4381 Engineering Design VII

A capstone design experience with small groups of students, each group advised by a designated faculty member. Includes the establishment of objectives and criteria, modeling, analysis and synthesis, and synthesis, and aesthetics for the preliminary design stages of each group's project. Projects will involve realistic design constraints such as ethics, health and safety, manufacturability, sustainability, economics, the environment, and social and political issues. Oral and written reports and design journals are required. Prerequisite: Consent of Department Chair.

## ENGR-4382 Engineering Design VIII

The capstone experience continued, including final design, construction, testing, and evaluation of the projects started in ENGR 4381. Oral and written reports and design journals are required. Prerequisite: ENGR 4381 or consent of Department Chair.

### ENGR-3-90 Directed Research

Individual research conducted under faculty supervision. Oral and written communication of results is required, including an end-of-semester written report. Credit may vary from 1 to 3 hours. The course may be repeated for additional credit. Prerequisites: Consent of instructor and the department chair.

### ENGR-1-90 Directed Research - Introductory Level

Individual research conducted under faculty supervision. Oral and written communication of results is required, including an end-of-semester written report. Credit may vary from 1 to 3 hours. The course may be repeated for additional credit. Prerequisites: Consent of instructor and department chair.

### ENGR-2-91 Problems in Engineering

Independent work on problems in engineering as indicated by the student's preparation and interest. 1 to 6 semester hours. Prerequisite: Consent of Instructor

### ENGR-4-91 Problems in Engineering

Independent work on problems in engineering as indicated by the student's preparation and interest. 1 to 6 semester hours. Prerequisite: Consent of Department Chair.



# Entrepreneurship

## Faculty

[Luis E. Martinez, Ph.D.](#) , Director of the Center for Innovation and Entrepreneurship

## Overview

The Entrepreneurship minor is designed to cultivate, coordinate, and integrate Trinity's diverse resources for the development and application of more creative entrepreneurial behavior and achievement. It builds on the overlap of three clusters of programs: arts and humanities, science and engineering, and business and social sciences.

The Entrepreneurship minor provides students an interdisciplinary approach to the process of creativity and entrepreneurship. This minor focuses on the process of creativity, opportunity identification and evaluation, design and innovation, financing, strategy, marketing, and new venture development. This minor offers an opportunity for students to form multidisciplinary entrepreneurship project teams (E-Teams) for transforming creative ideas into practical realities, and to interact with alumni entrepreneurs.

This minor requires twenty-one hours of coursework with at least nine hours at the upper-division level.

Students who wish to go beyond the minimum required of this minor should investigate the possibility of an Interdisciplinary Second Major and prepare an expanded plan that integrates more of these courses. A form that describes the Interdisciplinary Second Major is available in the Office of the Registrar.

## Requirements

### The Minor

#### Core Courses

From this list select twelve hours of coursework, including the specified section of GNED 1300 or GNED 2340 and ENTR 3340, 3341, and 4193.

GNED 1300	First Year Seminar: Creativity and Entrepreneurial Behavior
GNED 2340	Creative Thinking and the Artistic Process
ENTR 3-90	Directed Studies—Junior Level

ENTR 3340	Innovation, Design, and Entrepreneurship
ENTR 3341	Entrepreneurial Planning and Strategies
ENTR 4-90	Directed Studies—Senior Level
ENTR 4193	Capstone—E-Team Project

### Elective Courses

Along with members of the advisory committee, students will select three elective courses that meet the following criteria: (1) the specific courses selected should encourage students to develop essential skills for their entrepreneurial development or lead students to investigate broader areas of social concern; and (2) the courses must be approved by the advisory committee of the minor.

## Courses

### ENTR-2111 Introduction to Entrepreneurship I

This course serves as an introduction to entrepreneurship, focusing on the process of brainstorming, recognizing and evaluating entrepreneurial opportunities and developing a preliminary business model around that opportunity. Designed for all majors, prior business experience or previous coursework in business is not required. Students residing in Entrepreneurship Hall should enroll in this class for credit. (Offered every semester)

### ENTR-2112 Introduction to Entrepreneurship II

This course serves as an introduction to entrepreneurship, focusing on the process of brainstorming, recognizing and evaluating entrepreneurial opportunities and developing a preliminary business model around that opportunity. Designed for all majors, prior business experience or previous coursework in business is not required. Students residing in Entrepreneurship Hall should enroll in this class for credit. (Offered every semester) Prerequisite: ENTR 2111

### ENTR-3340 Innovation, Design, and Entrepreneurship

This course focuses on the process of innovation and design for entrepreneurial venture development. In this course students learn to develop a persuasive structure to make innovative ideas attractive and defensible. Design is an essential step in transforming innovative ideas into practical reality. This course focuses on the use of design as a form of expression, including development of functional prototypes of innovative ideas potentially leading to entrepreneurial ventures. In this course students are required to form multidisciplinary design teams. Students develop the knowledge, skills, and behaviors related to developing innovative ideas, design methodologies, use of appropriate information, materials, tools, and technology for entrepreneurial ventures. Prerequisites: GNED 2340 (also listed as ART 2314 and THTR/ENGL/MUSC 2340) and Junior standing, or consent of instructor.

## ENTR-3341 Entrepreneurial Planning and Strategies

This course focuses on entrepreneurial planning and strategies with emphasis on the areas of financing, management, and marketing. Major topics include attracting seed and growth capital from sources such as individuals, venture capital, investment banking, and government and commercial banks; creating marketing plans for a new venture; entrepreneurial or opportunity oriented management, strategic control, operational functions, and organizational management; short- and long- range planning; and measurement of economic performance. Prerequisite: ENTR 3340

## ENTR-3-90 Directed Studies: Junior Level

Independent study under faculty supervision with emphasis on the latest developments in entrepreneurship and preparation of the E-Team projects. May be repeated up to three hours. Prerequisites: GNED 2340 (also listed as ART 2314 and THTR/ENGL/MUSC 2340) and Junior standing, or consent of instructor.

## ENTR-3-95 Internship

An off-campus internship with an accepted employer in the private, public, or non-profit sector. This structured and supervised professional work experience must be pre-approved and include a relevant deliverable assignment, service, or project for the company or non-profit. The experience may be paid or unpaid. Variations in credit according to the work performed, from 0 to 6 hours. A maximum of 6 hours of internship credit may be applied to a Trinity degree. Must be taken Pass/Fail. (Offered every semester.) Prerequisite: Consent of the instructor

## ENTR-4-90 Directed Studies - Senior Level

Independent Study under faculty supervision with emphasis on completing the major project of the entrepreneurship program. May be repeated for up to three hours. Prerequisite: ENTR 3340 and Senior Standing

## ENTR-4193 Capstone for E-Team Project

This is the capstone course for students in the entrepreneurship program, a course in which all elements of the program are tied together. In this course each E-Team project group develops a comprehensive business or operational plan for its entrepreneurial venture. Students are required to defend their strategic plan for a panel of potential investors. This course incorporates wisdom, insight, and experiences for successful entrepreneurs and explains the benefits and risks involved in the proposed entrepreneurship ventures. Prerequisite: ENTR 3341 and senior standing, or consent of instructor

## ENTR---91 Special Topics in Innovation and Entrepreneurship

Study of a topic or field not covered by other courses. Lower division offerings will provide an introductory approach to a topic. Upper division courses will involve in-depth analysis of a specific area, and will usually require prerequisite courses, at the discretion of the instructor. May be repeated for credit on different topics. Prerequisite:

## Consent of Instructor

# Environmental Studies

## Faculty

[Kelly Grey Carlisle, Ph.D.](#) , Associate Professor

[Greg Hazleton, Ph.D.](#) , Visiting Assistant Professor

[Glenn Kroeger, Ph.D.](#) , Associate Professor, Geosciences

[Kelly Lyons, Ph.D.](#) , Associate Professor, Biology

[Jennifer P. Mathews, Ph.D.](#) , Professor, Sociology and Anthropology

[Shana McDermott, Ph.D.](#) , Assistant Professor, Economics

[Judith Norman, Ph.D.](#) , Professor, Philosophy

[Richard K. Reed, Ph.D.](#) , Professor, Sociology and Anthropology

[David Ribble, Ph.D.](#) , Professor, Biology; Director

[Heather Sullivan, Ph.D.](#) , Professor, Modern Languages and Literatures

[Benjamin Surpless, Ph.D.](#) , Associate Professor, Geosciences

[Elizabeth Ward, M.F.A.](#) , Professor, Art and Art History

## Overview

Environmental Studies is an interdisciplinary major that focuses on the environment and humans' relationship with it. The program incorporates a variety of approaches in the arts and humanities, the natural sciences, social analysis, and social policy. Students may choose an Environmental Studies major to explore the environment from a scientific perspective or to prepare for a career in one of the many fields that seek to monitor, shape, or interpret our relationship with it. Environmental Studies majors have extensive interaction with the natural world in research, class projects, and internships.

## Requirements

- [The Major](#)
- [The Minor](#)
- [Honors in Environmental Studies](#)
- [ESAC Certification: "Green Leaf" Courses for Environment/Sustainability Across the Curriculum \(ESAC\)](#)

# The Major

The requirements for the degree of Bachelor of Arts with a major in Environmental Studies are at least 43 credit hours as follows:

## I. The Introductory Course (3 credit hours):

ENVI 1301	Introduction to the Environment
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## II. Fundamental skills (23-24 credit hours):

ANTH 2357	Humans and the Environment
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BIOL 1311	Integrative Biology
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BIOL 1111	Introductory Biology Laboratory
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ECON 1311	Principles of Microeconomics
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ECON 3330	Economics and the Environment (also listed as URBS 3330)
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GEOS 1409	Earth's Environmental System (with lab)
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PHIL 1350	Environmental Ethics
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URBS 3330	Economics and the Environment (also listed as ECON 3330)
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And one of the following (3-4 hours):

ART 2495	Outdoor Studio
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CMLT 2350	Science Fiction and the Environment
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CMLT 2301	World Literature and the Environment
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ENVI 3391	Environmental Literature
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## III. Area Concentration (16-22 credit hours):

Students must complete one of the following concentrations:

- [Environmental Science](#)
- [Environmental Policy](#)
- [Environmental Arts and Humanities](#)

### A. Environmental Science (12-24 credit hours)

The Environmental Science concentration prepares students for graduate programs in environmental

science and for careers in laboratory and field monitoring and evaluation of environmental data.

CHEM 1318	General Chemistry
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CHEM 1118	General Chemistry Laboratory
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And Concentration Courses completing one of the following areas:

**1. Biology**

BIOL-2412	Cells, Systems, and their Environment
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BIOL 2413	Genes, Phenotypes, and Evolutionary Dynamics
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CHEM-2119	Laboratory Methods in Organic Chemistry
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CHEM-2319	Organic Chemistry I
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**And 3 of the following:**

ANTH 2310	Human Evolution
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BIOL 3434	Ecology
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BIOL 4351	Conservation Biology
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BIOL 3426	Vertebrate Biology
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BIOL 3427	Plant Biology
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BIOL 3420	Animal Behavior
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**2. Geosciences (4 of the following):**

GEOS 2400	Dynamic Earth
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**And 3 of the following:**

GEOS 2401	Earth History
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GEOS 2304	Earth Surface Processes
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GEOS 3408	GIS and Remote Sensing
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GEOS 3310	Global Climate Change
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GEOS 3400	Earth Materials
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GEOS 3411	Hydrology
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**3. Physics (4 of the following):**

PHYS 1309 or PHYS 1311	General Physics I
PHYS 1310 or PHYS 1312	General Physics II
PHYS 2311	Introduction to Biophysics
PHYS 3312	Geophysics
PHYS 3321	Statistical Physics and Thermodynamics
PHYS 3322	Classical Mechanics and Nonlinear Dynamics

**4. Engineering (4 of the following):**

ENGR 2311	Mass and Energy Balances
ENGR 2359	Fundamentals of Environmental Engineering
ENGR 3327	Thermodynamics I

One course from the courses listed above for the Environmental Science concentration in Biology, Geosciences, or Physics.

**B. Environmental Policy: (18-19 credit hours)**

The **Environmental Policy** concentration is intended for students seeking an interdisciplinary approach to the evaluation of environmental policy, environmental justice, and environmental issues. It prepares students for graduate programs in public policy and other social sciences and for careers in nonprofit, education, government, and consulting organizations.

ENVI 2301	Environmental Science Methods and Analysis
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And 1 course from each of the following areas:

**1. Analytical Approaches: Economics:**

BUSN 3338	Government Regulation of Business (also listed as ECON 3338)
ECON 3323	Economics of the Government
ECON 3334	Urban Economics (also listed as URBS 3334)
ECON 3338	Government Regulation of Business (also listed as BUSN 3338)
URBS 3334	Urban Economics (also listed as ECON 3334)

**2. Analytical Approaches: Political Science**



PLSI 3313	Policy Analysis and the Policymaking Process
PLSI 3316	Urban Politics
PLSI-3366	Governance and Public Policy in Contemporary China

### 3. Perspectives: Case Studies I

ANTH 3367	South American Indigenous Peoples
ANTH 3464	Morality in the Marketplace
ANTH 4354	Seminar on Primatology

### 4. Perspectives: Case Studies II

ENVI 4309	Special Topics in Environmental Policy
SOCI 3340	Urban Geography
ANTH/SOC 3345	International Issues in Health and the Environment
SOCI 4362	Globalization and International Development

### 5. Applications:

ENVI 4395	Environmental Internship
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## C. Environmental Arts and Humanities (18 credit hours)

The Environmental Arts and Humanities concentration offers students the opportunity to develop their interpretive, expressive, and critical skills and talents in areas of art, literature, and the humanities in the context of environmental issues.

ENVI 2301	(Environmental Science Methods and Analysis)
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And 5 courses from the following (\* These classes may be taken as Concentration Courses if not included as a Required Foundation Course.):

ART 2495*	Outdoor Studio
ARTH 3452	Nineteenth-Century Architecture and Urbanism
ARTH 3354	Architecture of Mexico
ARTH 3464	Twentieth-Century Architecture and Urbanism
CMLT 2301*	World Literature and the Environment

CMLT 2350	Science Fiction and the Environment
ENGL 2303	American Literature: Colonization to 1900
ENGL 3365	Nineteenth-Century British Poetry
ENVI 3391	Environmental Literature
PHIL 3432	Philosophy of Science
PHIL 3452	Social and Political Philosophy

#### IV. Senior Seminar in Environmental Studies: ENVI 4301

**V. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

## The Minor

The Environmental Studies minor is an interdisciplinary study of the Earth's environment and human interaction with that environment. The required courses address environmental issues from natural science, economic, and sociocultural perspectives. At least nine hours need to be upper-division courses. In addition, it is recommended that Environmental Studies Minors complete ENVI 4301, Senior Seminar in Environmental Studies.

Given the breadth of this minor, a significant overlap with a student's choice of Pathways courses is both expected and encouraged. To that end, courses that fulfill an understanding are indicated (\*) in the following lists.

Requirements for the minor are listed below, including at least 12 hours of lower division and 9 hours of upper division courses.

### I. Required Courses

ENVI 1301*	Introduction to Environmental Studies
BIOL 1311*	Integrative Biology I
BIOL 1111	Introductory Biology Laboratory
ECON 1311*	Principles of Microeconomics
GEOS 1409	Earth's Environmental Systems
GEOS 2400	Dynamic Earth
ECON 3333*	Economics and the Environment (also listed as URBS 3333)

**II. One course from the following list (check catalog for prerequisites)**

BIOL 3434	Ecology
BIOL 3420	Animal Behavior
CHEM 2319*	Organic Chemistry I
CHEM 2119*	Laboratory Methods in Organic Chemistry
ENGR 2311	Mass and Energy Balances
GEOS 2304	Earth Surface Processes
GEOS 3411	Hydrology
GEOS 3308	GIS and Remote Sensing

**III. One course from the following list (check catalog for prerequisites)**

ANTH 2357	Humans and the Environment
ANTH 3464	Morality in the Marketplace
ANTH 4354	Seminar in Primatology
CMLT 2301	World Literature and the Environment
ECON 3318	Global Economy
ECON 3334	Urban Economics (also listed as URBS 3334)
ENVI 3391	Environmental Literature
ENVI 4390	Special Topics in Environmental Policy
HIST 3382	The City in History (also listed as URBS 3305)
PLSI 3313	Policy Analysis and the Policymaking Process
URBS 3305	The City in History (also listed as HIST 3382)
URBS 3334	Urban Economics (also listed as ECON3334)
ENVI 4301	Recommended: Senior Seminar in Environmental Studies

The course is available to seniors and may be taken only once for credit.

# Honors in Environmental Studies

Environmental Studies majors are eligible to receive Honors if they have completed two semesters of Senior Thesis credit and presented a senior thesis or project, which has been evaluated and approved by Environmental Studies faculty. In addition, students must attain an overall 3.3 grade point average cumulatively and in the major. Prior to registration for their senior year, Environmental Studies Honors candidates must meet with the Environmental Studies program chair and arrange for the faculty thesis director and two additional faculty members to act as an Honors Advisory Committee. Students must submit to the program chair a written request to graduate with Honors in Environmental Studies no later than the first full week of the student's final semester before graduation. The decision to confer or not to confer Honors will be made by the program chair, the Honors Committee and two additional faculty from the Environmental Studies Committee, based on the quality of the written thesis or art work and the oral presentation of that material.

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## ESAC Certification: "Green Leaf" Courses for Environment/Sustainability Across the Curriculum (ESAC)

Students interested in an Environment/Sustainability across the Curriculum (ESAC) certification have the opportunity to study the wide-ranging interdisciplinary questions relating to the environment and sustainability through a variety of courses while they pursue any major at Trinity. The program offers a certification as a supplement to traditional majors and minors.

Students earn the certification by successfully completing a minimum of five of the "Green Leaf" courses accepted by the program. ("Green Leaf" courses are noted in the class schedules in the text under the course title.)

At least one class of the five must be taken from each of the three categories:

- I. Sciences and engineering;
- II. Humanities and arts;
- III. Social sciences and business.

No more than two courses can be in the student's major.

## Green Leaf courses counting toward certification:

### I. Sciences and Engineering:

BIOL 1307	Biological Impact and Issues
BIOL 1311	Integrative Biology I
BIOL 3391	Selected Topics: La biodiversidad y Conservación de México
BIOL 3427	Plant Biology
BIOL 3434	Ecology
BIOL 4351	Conservation Biology
CHEM 3321	Inorganic Chemistry
ENGR 2359	Fundamentals of Environmental Engineering
GEOS 1304	Environmental Geology
GEOS 1307	Exploring Earth
GEOS 1405	Oceanography
GEOS 3411	Hydrology
PHYS 1303	The Earth's Changing Environment
PHYS 3348	Atmospheric Physics

### II. Humanities and Arts:

ART 2495	Outdoor Studio
ARTH 3452	Nineteenth-Century Architecture and Urbanism
ARTH 3464	Twentieth-Century Architecture and Urbanism
ARTH 3365	Contemporary Architecture
CLAS 1304	Introduction to Archeology of the Aegean, Classical, and Roman Worlds
CMLT 2301	World Literature and the Environment
ENGL 3365	Nineteenth-Century British Poetry
ENGL 3371	American Literature of the Nineteenth Century: Realism and Naturalism
HIST 3337	Technology and Culture
HIST 3344	Modern Brazil

HIST 3382	The City in History (also listed as URBS 3304)
ML&L 3342	The Peoples of Russia
URBS 3304	The City in History (also listed as HIST 3382)

### III. Social Sciences and Business:

ANTH 1301	Introduction to Anthropology
ANTH 2357	Humans and the Environment
ANTH 3349	Globalization and Social Change (also listed as SOCI 3349)
ANTH 3364	Economic Anthropology
ANTH 3367	South American Indigenous Peoples: Conquest and Development
ANTH 4354	Seminar in Primatology
ECON 3330	Economics and the Environment (also listed as URBS 3330)
PLSI 1332	Film, Literature, and Politics of the Third World
SOCI 1316	Places and Regions in Global Context (also listed as URBS 1316)
SOCI 3340	Urban Geography (also listed as URBS 3340)
SOCI 3349	Globalization and Social Change (also listed as ANTH 3349)
URBS 1310	The Urban Experience
URBS 1316	Places and Regions in Global Context (also listed as SOCI 1316)
URBS 3330	Economics and the Environment (also listed as ECON 3330)
URBS 3340	Urban Geography (also listed as SOCI 3340)

### Additional Green Leaf Courses:

When First-Year Seminars and Writing Workshops have topics related to environment/sustainability, or when departments offer a relevant “special topics” or “variable content” course, the Faculty Advisory Committee may approve such courses for inclusion within the ESAC certification program.

## Courses

### ENVI-1301 Introduction to Environmental Studies

Students study an interdisciplinary approach to environmental inquiry and action, which spans three areas: the natural sciences, social policy, and the humanities. Students engage in readings, discussions, and field trips from

biology, geosciences, economics, social justice, art, ethics, and literature. This approach introduces students to the broad field of Environmental Studies and to the specific tracks of the major. (Offered every year.)

### ENVI-1305 Advanced Placement Credit in Environmental Science

Students earning 4 or 5 on the Advanced Placement Test in Environmental Science or earn at least a 5 in the International Baccalaureate Environmental Systems and Societies course will receive AP credit through this course.

### ENVI-2-10 Environmental Studies Field School

Students will analyze the changing face of geological systems, flora and fauna, and human society over time and space. Particular attention will be paid to land use over time and space, using skills of the natural sciences and policy analysis, as well as perspectives of art and literature.

### ENVI-2301 Environmental Science Methods and Analysis

This course is an introduction to methods and analysis used by different disciplines in the environmental sciences. Three field investigations will be conducted by students that involve field and laboratory methods using instrumentation and spatial analysis (e.g. Geographic Information Systems). These investigations will emphasize interdisciplinary approaches, experimental design, access to and use of scientific literature and effective communication of scientific process and results. This 3 credit course meets once per week for a 75 min lecture and once per week for a 4 hour laboratory. Prerequisites: BIOL 1311 and GEOS 1304

### ENVI-3301 Environmental Literature

This course introduces students to environmental literature, including traditional nature writing from the nineteenth century to the present and more contemporary literary expressions about environment that reach beyond nature writing. Students will explore how literary works and critical theories help shape environmental understanding and how literary practices relate to other kinds of environmental discourses, such as those in the sciences and policy arenas. (Offered every Spring.)

### ENVI-3-90 Environmental Studies Independent Study

Individual research in a selected area or of a selected topic. A student may repeat the course for a maximum of six semester hours. A project proposal must be submitted to and approved by the professor supervising the research prior to registration. Prerequisite: consent of instructor.

### ENVI-4301 Senior Seminar in Environmental Studies

An in-depth synthesis of special topics from the Environmental Studies curriculum, with application to current environmental problems. Student work will integrate the three primary areas of environmental studies: the natural

sciences, policy analysis and arts and humanities. Prerequisites: Senior standing

### ENVI-4390 Topics in Environmental Policy

The course examines environmental policy as applied to specific cases of environmental problems and natural resource management. Topics vary. A student may repeat the course for a maximum of six semester hours.

Prerequisite: Consent of the program chair required

### ENVI-4395 Environmental Studies Internship

Field work experience in a setting arranged and approved by the student, a faculty member of the Environmental Studies Advisory committee, and a non-University institution. Supervision and guidance will be provided by the host agency and contact with the professor must be maintained. A student may repeat the course for a maximum of six semester hours. This course is taken Pass/Fail.

### ENVI-4398 Thesis Research

Independent scholarly, scientific, or artistic work conducted under the supervision of a faculty thesis director. Course enrollment requires that the student submit a proposal, with the approval of a thesis director, to the Environmental Studies program chair before classes commence in the semester of ENVI 4398 credit. That proposal will be considered for approval by the program chair in consultation with the thesis director before the end of the add-drop period. (Every semester)

### ENVI-4399 Thesis Writing and Presentation

A continuation of student work begun in ENVI 4398. Students are required to complete the project and present their work to students and faculty, the latter including the Environmental Studies program chair, the faculty mentor, and at least two other faculty members. (Every Semester) Prerequisite: Senior status required and ENVI 4395



# Film Studies

## Faculty

[Aaron Delwiche, Ph.D.](#) , Professor, Communication

[Nina C. Ekstein, Ph.D.](#) , Professor, Modern Languages and Literatures

[Jennifer Jacobs Henderson, Ph.D.](#) , Professor, Communication

[Rachel Joseph, Ph.D.](#) , Assistant Professor, Human Communication and Theatre

[Patrick Keating, Ph.D.](#) , Associate Professor, Communication; Director

[Curtis Swope, Ph.D.](#) , Associate Professor, Modern Languages and Literatures

[Rita E. Urquijo-Ruiz, Ph.D.](#) , Associate Professor, Modern Languages and Literatures

[Michael Ward, Ph.D.](#) , Associate Professor, Modern Languages and Literatures

## Overview

## The Minor

The minor in Film Studies is an interdisciplinary program that explores film as a cultural, artistic, and commercial product. Students will have the opportunity to study film principles through theory, history, and practice.

## Requirements

The requirements for a minor in Film Studies are as follows:

**I. Complete 21 credit hours in the following distribution:**

A. FILM 1301 Introduction to Film Studies (also listed as COMM 1302)

B. One of the following seven courses:

CHIN 3312	Chinese Cinema
CHIN 3313	Cities of Strangers: Trans-Cultural Chinese Cinema
FILM 2301	International Cinema (also listed as COMM 2301)
ML&L 3311	French Cinema

ML&L 3321	German Cinema
SPAN 3321	Spanish Cinema
SPAN 3322	Spanish American Cinema

C. Six additional hours taken from at least two departments or languages from the Study Coursework list.

D. Three hours from the Practice Coursework list.

E. Six hours of electives chosen from either the Study or Practice Coursework list.

## II. Guidelines for selection of coursework:

A. At least nine hours of coursework in the Film Studies Minor must be upper division.

B. No more than nine hours of the coursework can be taken from one department to fulfill the requirements of the minor.

## Film Studies Core

### Study Coursework

ARTH 3357	History of Photography
CHIN 3312	Chinese Cinema
CHIN 3313	Cities of Strangers: Trans-cultural Chinese Cinema
COMM 3325	Special Topics: Film Noir
FILM 1301	Introduction to Film Studies (required; also listed as COMM 1302)
FILM 2301	International Cinema (also listed as COMM 2301)
HIST 3372	Black Images in Film
ML&L 3311	French Cinema
ML&L 3321	German Cinema
ML&L 3344	Russian Cinema
MUSC 1347	Introduction to Film Music
PHIL 3457	Philosophy of Film
PLSI 2432	Film, Literature, and Politics of the Third World
SPAN 3321	Spanish Cinema
SPAN 3322	Spanish American Cinema

RELI 3418	Religion and Film
THTR 2332	Play Structure and Analysis

### Practice Coursework

ART 2450	Photography I
ART 3450	Photography II
ART 3452	Photography III
ART 4-50	Advanced Photography
ART 2452	Digital Photography I
ART 4-52	Advanced Digital Photography
ART 2380	Digital Art
ART 3380	Advanced Digital Art
COMM 3-40	Media Writing: Scriptwriting
COMM 3-42	Visual Communication
COMM 3-46	Video Communication
ENGL 2402	Fiction Writing
THTR 1320	Introduction to Production Techniques
THTR 1352	Acting I
THTR 2310	Principles of Design
THTR 2314	Principles of Stage Lighting
THTR 2352	Acting II: Scene Study
THTR 3340	Directing
THTR 3360	Playwriting

## Courses

### FILM-1301 Introduction to Film Studies

This course is an introduction to the artistic, cultural, and scholarly importance of film. The course focuses on the

development of film as a complex art form, the evolution of narrative as part of a formal system, the development of the industry and film genres, critical and cultural approaches to film analysis, and the construction of the audience. Students will read excerpts from primary texts as well as more general texts dealing with film interpretation and criticism. (Also listed as COMM 1302).

## FILM-2301 International Cinema

This course focuses on the cultural and critical analysis of international films as an expression of particular artistic genres and/or styles within specific historical, ideological, and cultural contexts. Films selected have achieved wide, critical acclaim; others reveal unique and important visions of human experience; while others are selected for their political, ideological, or sociological significance. Students should develop an awareness that the medium of film has a history and that its history is not confined to national boundaries. (Also listed as COMM 2301).

# Geosciences

## Faculty

[Kurt Knesel, Ph.D.](#), Visiting Assistant Professor

[Glenn Kroeger, Ph.D.](#), Associate Professor

[Dan Lehrmann, Ph.D.](#), Gertrude and Walter Pyron Professor of Geosciences

[Diane Smith, Ph.D.](#), Imogene and Harold Herndon Professor of Geology

[Benjamin Surpless, Ph.D.](#), Associate Professor

[Kathleen Surpless, Ph.D.](#), Professor; Chair

Brady Ziegler, Ph.D., Assistant Professor

## Overview

The department of Geosciences offers two degrees, a Bachelor of Arts in Earth Systems Science and a Bachelor of Science in Geosciences. The Bachelor of Arts program prepares students interested in careers or disciplines that require a fundamental understanding of earth systems, (e.g., environmental science, secondary education, law, geography). This BA program offers flexibility, allowing students to pursue intensive study in disciplines. The Bachelor of Science program prepares students for graduate work in geosciences or for entry-level positions in geosciences or related fields. The BS program serves the student interested in a broad-based introduction to geosciences and provides opportunities for joint student-faculty research projects.

## Requirements

- [Departmental requirements: Bachelor of Arts Degree in Earth Systems Science \(ESYS\)](#)
- [Departmental requirements: Bachelor of Science Degree in Geosciences](#)
- [The Minor](#)
- [Honors in Geosciences](#)

## The Major

### Departmental requirements: Bachelor of Arts Degree in Earth Systems

## Science (ESYS)

The requirements for the degree of Bachelor of Arts with a major in Earth Systems Science are:

### A. At least 30 credit hours in geosciences, including:

1. One of GEOS 1303, GEOS 1304, GEOS 1405, GEOS 1406, 1307, or 1409.
2. GEOS 2400.
3. GEOS 2401, 2304, and 3400.
4. Participation in GEOS 3120 is required for junior majors. Trip expenses, including transportation, must be paid by each student.
5. At least eleven additional upper division hours in geosciences; no more than three hours of Directed Studies or Thesis may be applied to this upper division hour requirement.
6. GEOS 4001.

### B. 18 additional credit hours from the following courses:

1. At least 9 credit hours from ANTH 2310; BIOL 1311, 1111, 2312, 2112, 2305, 3434; BUSN/ECON 2301; CHEM 1318, 1118, 2319, 2119; MATH 1311, 1312, 1320, 2308; CSCI 1320; PHYS 1303, 1309, 1311, 1111, 1310, 1312, 1112; PSYC 2401.
2. At least 6 credit hours from CMLT 2301, 2350; ECON/URBS 3330; ANTH 2310, 2357; PHIL 1350, 2456; SOCI 1316, 2314; URBS 3340; or additional courses approved by Geosciences Faculty.

### C. University requirements:

Completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

## Bachelor of Science Degree in Geosciences

The requirements for the degree of Bachelor of Science with a major in geosciences are:

### A. At least 35 credit hours in geosciences, including:

1. One of GEOS 1303, GEOS 1304, GEOS 1405, GEOS 1406, 1307, or 1409.
2. GEOS 2400.
3. GEOS 2401, 2304, 3400, and 3401; either 3309 or 3412; either 3422 or 3423; plus 6 additional upper division hours in geosciences; no more than 3 hours of Directed Studies or Thesis may be applied to this upper division hour requirement.
4. Participation in GEOS 3120 is required for junior majors. Trip expenses, including transportation, must be paid by each student.
5. GEOS 4001.

**B. MATH 1311 and one of MATH 1312, 1320, or 2308; CHEM 1318 and 1118; PHYS 1309 or 1311, PHYS 1310 or 1312; PHYS 1111 and 1112.**

**C. University requirements:** Completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

It is recommended that students planning to attend graduate school or enter directly into a field-oriented aspect of the discipline take an accredited and departmentally approved summer field geology course.

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## The Minor

### Requirements

The requirements are at least 18 hours of geoscience courses including GEOS 2400 and at least 9 hours of upper-division geoscience courses.

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## Honors in Geosciences

### Requirements

Six hours of Thesis credit, GEOS 4395 and 4396, must be completed over two semesters. Students may enroll for thesis credit only with the permission of the thesis director. A formal written thesis proposal must be submitted to the geosciences faculty before the end of the fourth week of classes during the first semester of enrollment for thesis credit. The student may become a formal candidate for Departmental Honors by addressing a written request for consideration, accompanied by a letter of support from the student's thesis director, to the Chair of the department. Achievement of Department Honors will be determined by the quality of the thesis research, the written and oral presentations, and satisfaction of University requirements.

## Courses

### GEOS-1303 Volcanology

The study of volcanoes with emphasis on volcanic morphology, eruptive mechanisms, rock types, and magmatic properties and processes. Volcanoes will be examined in the context of plate tectonic theory. Natural resources

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produced by volcanic processes and geologic hazards associated with volcanism will be discussed. (Offered every other year. )

### GEOS-1405 Oceanography

A inquiry-based introduction to the geologic, chemical, physical and biologic aspects of the Earth's oceans. Topics include plate tectonics, seawater composition, waves, tides, currents, marine habitats and ecosystems and global climate change. Approximately one half of the course meeting times will be data analysis, laboratory or field activities. Field trip required; field trip costs must be paid by each student. (Offered every year.)

### GEOS-1406 History and Evolution of Life

An inquiry-based study of major events in the history and evolution of life. Topics include fundamentals of earth systems, the origin of life, mechanics of evolution, diversification of life, the invasion of land, innovation of flight, mass extinctions, evolution of mammals, primates and hominids, and how human activity may affect the future of life. Three class hours each week, three full-day field trips, and out of class projects including analysis and synthesis of data gathered on field trips. Field trips are required; field trip costs must be paid by each student. (Offered every Spring)

### GEOS-1304 Environmental Geology

A study of the environment that humans inhabit on Earth. Topics include geologic hazards such as volcanism, earthquakes, mass wasting and flooding; geologic resources such as soils, groundwater, mineral resources and fossil fuels; and the interaction of human activities with the geologic environment including urban development, flood control, agriculture, and climate change. Field trip is required; field trip costs must be paid by each student.

### GEOS-1307 Geology, Resources, and Environmental Issues of China and Southeast Asia

A survey of the basic geology, natural resources and environmental issues of China and southeast Asia. The fundamental geologic context of China and southeast Asia will be presented in the context of plate tectonics, Earth system process and Earth history. A large part of the course will be in seminar format. Discussion topics will focus on the unique geological features of China and southeast Asia, the geology of hydrocarbon, metallic and non-metallic resources, and the unique environmental challenges China and southeast Asia face as a result of rapid economic development.

### GEOS-1409 Earth's Environmental Systems

An inquiry-based examination of the interaction of the Earth's natural systems and the role that humans play in determining the evolution of those systems. Topics include plate tectonics, solid earth processes and resources, surficial physical and chemical processes, energy resources, and global climate change. Field trips required; field trip costs must be paid by each student. Only one of GEOS 1409 and GEOS 1304 may be taken for credit. (Offered every year.)



## GEOS-2400 Dynamic Earth

An intermediate-level, inquiry-based study of the fundamental geological materials and processes of the Earth. Topics include plate tectonics, geophysical studies of the subsurface, mineral properties and formation, rock properties and formation, volcanic processes and landforms, earthquake processes, geologic map interpretation, cross section construction, and relative and absolute age dating. Three class hours and three laboratory hours each week. Field trips are required; field trip costs must be paid by each student. (Offered every year).

Prerequisites: One lower division GEOS Course or fulfillment of the Natural Sciences Approach of the Pathways curriculum.

## GEOS-2401 Earth History

A study of the significance of time as reflected in the rock and fossil record, with emphasis on understanding geological processes within a time framework. An analysis of time concepts, stratigraphic principles, and the fundamentals of sedimentary geology including the historical development of geological concepts and the recognition and reconstruction of ancient environments. Laboratory: study of minerals, rocks, and fossils; interpretation of surface features and time relationships through the use of topographic and geologic maps, cross sections, correlation diagrams, and aerial photos. Three class hours and three laboratory hours a week. Field trips are required; field trip costs must be paid by each student. Prerequisites: GEOS 2400

## GEOS-2304 Earth Surface Processes

A survey of the important processes that create landforms on the Earth's surface. Emphasis will be on chemical and physical weathering, running water, wind, ice, and the resulting erosional and depositional landforms. The laboratory component will emphasize data collection and analysis techniques, including topographic maps, surveying and field trips. Two class hours and three laboratory hours per week for one semester. Field trips required; field trip costs must be paid by each student. Prerequisite: GEOS 2400

## GEOS-3400 Earth Materials

An introduction to the origin, classification, and identification of minerals and rocks, including topics related to crystal systems and structures, bonding, mineral chemistry, the nature of magma, solidification of magma, magma genesis and evolution, types of metamorphism, metamorphic mineral reactions, metamorphic zones and facies, determination of metamorphic grade, and the importance of mineral and rock resources to society. The laboratory emphasizes methodologies and techniques used to identify and classify common minerals and rocks in hand specimen and thin section. Three class hours and three laboratory hours per week. (Offered every year.)

Prerequisite: GEOS 2400

## GEOS-3401 Structural Geology

A study of the mechanics of crustal deformation in the context of plate tectonics. An introduction to the descriptive, kinematic, and dynamic analysis of structures such as folds, faults, joint systems, and foliation.

Emphasis on the application of structural cross-sections, stereonet analysis, graphical techniques, and computer applications to problems involving stress and strain of earth materials. Three class hours and three laboratory hours per week. Field trips required; field trip costs must be paid by each student. (Offered every Fall.) Prerequisite: GEOS 2401 or GEOS 3400.

### GEOS-3402 Paleontology

A study of invertebrate fossils, their classification, morphology, and geologic history. Also included will be an introduction to the principles of paleontologic investigation and their application to the study of geology. Three class hours and three laboratory hours a week. Prerequisite: GEOS 2401, or consent of instructor.

### GEOS-3405 Field Methods in Quaternary Geology

A study of the tectonic and climatic controls on long-term landscape evolution. Emphasis will be on field and laboratory techniques for describing Quaternary landforms and deposits. Three class hours per week and an all-day field trip every other Saturday for one semester. Field trips required; field trip costs must be paid by each student. Prerequisite: GEOS 2304.

### GEOS-3307 Planetary Geology

An introduction to the geologic processes that operate on the surfaces and within the interiors of rocky ice-rich objects in the Solar System. Earth analogues, remote sensing, and the latest results from the robotic planetary exploration are used to investigate the origin and geology of the solar system. Topics include nebular materials and processes in the early solar system, orbital dynamics, meteorites and impact cratering, formation and evolution of lithospheres and atmospheres, volcanism and tectonics, weathering phenomena, planetary environments, space missions and the data sets they collect. Prerequisite: GEOS 2400

### GEOS-3309 Tectonics

Study of the tectonic processes of the Earth with emphasis on the historical development of tectonic theory and current research in tectonics. Topics include: geophysical and geochemical characterization of the Earth's interior, plate kinematics and dynamics, earthquake mechanisms, the nature and origin of continental crusts and margins, and the relationship between tectonics and rock-forming processes. Prerequisite: GEOS 3400

### GEOS-3310 Global Climate Change

An intermediate-level study of the fundamental science of global climate change. Topics include an introduction to the global climate system, a review of the fundamentals of energy transfer between earth systems, investigation of the geologic evidence of natural climate change, and evidence for anthropogenic climate change. The course will also delve into the present and future impacts of climate change on natural systems and human activities, and students will investigate potential viable solutions to global climate change. (Offered every other year.) Prerequisites: One lower division GEOS course.

## GEOS-3411 Hydrology

A description of the terrestrial hydrologic cycle and its fundamental components including precipitation, evapotranspiration, infiltration, hillslope hydrology, runoff, flood hydrology and groundwater flow. Emphasis will be placed on physical principles governing the movement of water across and through the Earth's surface. Human interaction with all aspects of the hydrologic cycle will be addressed. The laboratory component of the course will focus on data collection, analysis and manipulation, and involve a significant field component. Three class hours and three laboratory hours a week. Field trips are required; field trip expenses must be paid by each student. Prerequisites: GEOS 2304; PHYS 1309/1111 or Phys 1311/1111 or equivalent.

## GEOS-3412 Applied Geophysics

An introduction to the use of physical principles and measurements in the study of the Earth's subsurface, with an emphasis on applications in environmental science, engineering, mineral exploration and archeology. Topics include Fourier analysis, seismic waves in elastic media, refraction tomography, reflection seismology, multichannel analysis of surface waves, gravity, electrical resistivity and groundpenetrating radar. (Same as PHYS 3412) Three class hours and three laboratory hours per week. Field trips are required; field trip expenses must be paid by each student. Prerequisite: Prerequisite: PHYS 1310 or 1312 (may be taken concurrently).

## GEOS-3315 Iceland - Its Unique Geological, Economic and Cultural History

This course will expose students to the unique economic, geologic, and cultural history of Iceland. The economic aspects will focus on the role of financial markets and monetary institutions in economic booms and crashes using Iceland as a case study, possible solutions to public good problems such as the Icelandic fishing quota, business practices which often prioritize protection of the environment and social responsibility, and the role of international trade in development of a small country. The geological history will emphasize Iceland's plate tectonic setting, volcanism, glacial history and related hazards, geothermal energy, and the effects of climate change. The cultural portion will explore the fundamental role of literature in a country with virtually no illiteracy, and the role of the sagas in the transmission of culture, language, and the law in the country with the oldest parliament in the world. (Offered every other year).

## GEOS-3319 Field Geology in China

Field study of the evolution of sedimentary basins and mountain belts in China. Emphasis on developing observational and interpretive skills in the field. Additional goals are to gain an appreciation of Chinese culture, language and history by working together with Chinese students and studying a variety of sites of historical and cultural importance. Students interested in geosciences, environmental studies, anthropology, and Chinese languages and cultures are encouraged to apply. Prerequisites: One course in geology, consent of instructor.

## GEOS-3120 Majors' Field Trip

Field study of selected areas in Texas and surrounding regions: emphasis on developing observational and

interpretative skills in the field. May only be taken on a pass-fail basis. Field trip costs must be paid by each student. May be taken twice for credit. Prerequisite: Departmental major or by invitation of the department.

### GEOS-3321 Geochemistry

A study of geochemical principles and their application in solving geologic problems. Emphasis is placed on topics in inorganic geochemistry, including phase equilibria, isotopes and trace elements. Prerequisites: GEOS 3400 and MATH 1311 or consent of instructor.

### GEOS-3408 GIS and Remote Sensing

An introduction to computer-based mapping and spatial data analysis used in earth and life sciences and environmental monitoring and management. Topics include: digital representation of data and images; cartographic principles and the use of GPS; raster and vector based geographical information systems (GIS); geostatistics, kriging, and visualization of geospatial data sets; acquisition and analysis of multispectral remote sensing data, including principle component analysis and classification techniques. Three class hours and three laboratory hours a week. (Offered every year.) Prerequisites: Completion of both the Natural Sciences and the Quantitative Reasoning approaches within the Pathways curriculum.

### GEOS-3422 Sedimentology and Stratigraphy

The identification, description, and interpretation of sediments, sedimentary rocks, and sedimentary strata; an introduction to the principles of stratigraphy and of sedimentary processes as they relate to modern depositional systems and their ancient analogs. Emphasis will be place on the interpretation of depositional systems and sequence stratigraphy. Three class hours and three laboratory hours a week. Field trips are required; field trip costs must be paid by each student. Prerequisites: GEOS 2401 and 3400.

### GEOS-3423 Basin Analysis

Application of stratigraphic concepts to the study of basin evolution and the environmental history and geometry of sedimentary rock successions. Emphasis will be placed on tectonic evolution of basins, principles of stratigraphic correlation, carbonate depositional systems, sequence stratigraphy, event stratigraphy, stratigraphic modeling, and hydrocarbon systems. Laboratory experiments with outcrop sample suites, core and subsurface geophysical data sets. Three class hours and three laboratory hours per a week. Field trips required; field trip costs must be paid by each student. Prerequisites: GEOS 2401 and 3400.

### GEOS-3-90 Directed Studies - Junior Level

Individual work under supervision. Credit may vary. Prerequisites: Major or minor standing and consent of project supervisor.

## GEOS-3-91 Special Topics

An in-depth study of a topic in geosciences that is otherwise not covered in existing courses. May be repeated for credit on different topics. Prerequisite: Consent of instructor.

## GEOS-3-92 Internship

An off-campus internship in professional geoscientific practice. Internships may be arranged with businesses, nonprofit institutions and government agencies and must be supervised by a faculty member. Geoscientific field work, laboratory work or analysis must be conducted during the course of the internship. May be repeated for a maximum of 3 credit hours. May only be taken on a Pass/fail basis. Prerequisites: Prior written approval of the supervising faculty member and departmental permission.

## GEOS-4001 Senior Comprehensive Examination

Geosciences and Earth Systems majors with senior standing will take a comprehensive exam. Students will be required to attend a one-hour meeting held early in the Spring semester. The exam will be administered on a Saturday in February. May only be taken on a pass/fail basis. Prerequisites: Departmental major and senior standing.

## GEOS-4-90 Directed Studies - Senior Level

Individual work under supervision. Credit may vary Prerequisites: Major or minor standing and consent of project supervisor.

## GEOS-4395 Thesis Research

Student research conducted under the supervision of a Trinity University faculty member leading to written communication of the research in thesis format. Course enrollment requires planning with the thesis director during the Junior year. A written thesis proposal must be submitted to the department. Prerequisites: Senior standing and acceptance by a thesis director

## GEOS-4396 Thesis Research and Presentation

A continuation of student project begun in GEOS 4395. Students are required to write and defend their thesis according to University guidelines set forth in this Bulletin. An oral presentation of the thesis will be made to the students and faculty of the department. Prerequisite: GEOS 4395.

# General Education

## Courses

### FYE-1600 First-Year Experience

The First-Year Experience provides substantial instruction in written and oral communication skills while engaging a topic of widespread or enduring significance. For each topic, the First-Year Experience consists of multiple sections linked by a common syllabus and a weekly common learning experience for all students and faculty. Each section is taught by two instructors and is the equivalent of two three-hour courses.

### GNE-1100 Academic Success

This course introduces students to college-level expectations and to the techniques they need for academic success in college. This course offers a safe and supportive environment to learn key academic success strategies including, but not limited to, time and stress management, study skills, test-taking skills, and reading strategies. Open to all students. (Offered every semester).

### GNE-1101 Summer Math Bridge

A review of the math skills used most often in STEM courses, including systems of equations, logarithms and exponents, trigonometry, vectors, and imaginary numbers. The course is designed to help build numerical intuition and a foundation for an introduction to calculus. (Offered every year).

### GNE-1300 First Year Seminar

An interdisciplinary seminar focusing on variable themes, required of all first-year students.

### GNE-1301 Readings in Science and Religion

An examination of key issues regarding human nature and our place in the universe from religious, literary, and scientific perspectives, focusing on major debates in the discourse between science and religion in Western culture over the last five hundred years. Involves readings from primary texts, discussion of ideas in the texts both orally and in writing, and instruction in analytical and argumentative writing. Offered to first-year students as alternative to First Year Seminar (GNE 1300).

### GNE-1303 Japanese Perspectives

This course introduces the student to Japanese culture. The course begins with an inspection of Japanese

religions, especially its native Shinto, Buddhism, and Zen. It includes the development from rule by Emperor through rule by military or shogun to modern democracy. A third section covers the development of Japanese aesthetics as seen in its major literary and artistic production, for example, in poetry, Noh drama, ink-brush painting, pottery, and drama/film. The last section of the course covers the modern era, from Japan's reopening to outsiders in the 19th century to its current place as a world power. The stresses on Japanese social structures as they adapt to Western influence are viewed through a variety of means: government policies, societal experiments, novels and films, and so on. (Also listed as ML&L 1303.)

### GNE-1306 Energy and Society

A study of the physics and technology of energy systems and their impact on society.

### GNE-1341 Connected Science: Powering Our Lives

This course is intended primarily for students planning to become elementary school teachers or middle school science teachers. The course emphasizes the interdisciplinary application of fundamental scientific principles, practices, and ways of thinking to address questions relevant to everyday life. By exploring questions such as "How do we power our cars?" and "Why do we cook our food?", students will explore and apply foundational scientific concepts and processes by actively participating in scientific investigations and considering implications for curriculum design. Requirements: Consent of Instructor

### GNE-1342 Connected Science: Change Over Time

This course is intended for students who are non-science majors who wish to deepen their conceptual understanding of foundational biology and geoscience concepts, and is especially appropriate for students interested in pursuing elementary or middle level teaching careers. The course emphasizes the interdisciplinary application of fundamental scientific principles, practices, and ways of thinking to address questions relevant to the natural world. The course is organized around two driving questions: 1) How has earth changed over time? and 2) How has life changed over time? We will explore these by actively participating in scientific investigations. (Offered every Spring.)

### GNE-2110 McNair Tutorial - Sophomore Level

An examination of research design, research ethics, the presentation of research findings, and related issues for sophomore level participants in the McNair Scholars Program. May be repeated for a maximum of two hours credit. Pass/Fail only. Prerequisite: Admission to the McNair Scholars Program and consent of instructor.

### GNE-2340 Creative Thinking and the Artistic Process

This course encourages students to synthesize a theoretical and experimental approach to the creative process as studied through the visual arts, music, creative writing, and theatre. Students enter into the creative process as a means to develop creative self-expression, aesthetic sensibility, and an understanding of the arts. The nature and

drive of artistic endeavor is explored through studies of the lives of significant thinkers and artists, examinations of art works, guests lectures, and projects. Students will engage in activities and projects that will enable them to access and develop their own creative thinking skills in concert with traditional, analytic modes. (Also listed as ART 2314, DRAM 2340, ENGL 2340 and MUSC 2340.)

### GNED-3110 McNair Tutorial - Junior Level

An examination of research design, research ethics, the presentation of research findings, and related issues for Junior level participants in the McNair scholars Program. May be repeated for credit for a maximum of two hours credit. Pass/Fail only. Prerequisite: Admission to the McNair Scholars Program and consent of instructor.

### GNED-3-12 McNair Research Internship

Independent Study in connection with McNair Scholars Program research activities. May be repeated for a maximum of four hours credit. Pass/Fail only. Prerequisite: Admission to the McNair Scholars Program and consent of instructor.

### GNED-3325 The U.S. Latino Experience

An examination of the evolution of the Latino communities of the United States, with attention to the role of U.S. foreign policy in creating Latino communities, the impact of domestic policy on the various sub-groups, continuity and change in the Latino communities of the U.S. and the emergence of a trans-national Latino community and culture in the U.S.

### GNED-3326 U.S. Latino Culture and Artistic Expression

An examination and evaluation of U.S. Latino artistic/cultural expression, with specific attention to the artistic production of U.S. Latino artists, and the development of a unique U.S. Latino artistic expression.

### GNED-3328 The Peer Tutor

Course for peer tutors to First-Year Experience.

### GNED-3-91 Special Topics in General Education

Nondepartment-specific special-topic courses. Each offering must be approved by the University Curriculum Council. Students may repeat the course if on a different topic. There may be prerequisites.

### GNED-4110 McNair Tutorial - Senior Level

An examination of research design, research ethics, the presentation of research findings, and related issues for



senior level participants in the McNair Scholars Program. May be repeated for a maximum of two hours credit. Pass/Fail only. Prerequisites: Admission to the McNair Scholars Program and consent of instructor.

### GNED-4300 Senior Interdisciplinary Seminar

An Interdisciplinary Seminar focusing on various themes drawn from the humanities, social sciences, natural sciences, and/or quantitative reasoning. Prerequisite: Consent of Instructor.

### GNED-4301 Senior Synthesis

A course designed to allow the student to draw together and apply creatively the content acquired in the courses taken in the Understandings. Significant paper and presentation required for completion. Prerequisite: 3.0 GPA or better and consent of the course administrative coordinator.

### GNED-4355 Time Across Disciplines

This course pulls together the theme of time across the Common Curriculum and explores the interconnections. Sample topics include cultural differences in punctuality and orientations towards the future and past, the social construction of life-stages and age-graded roles, jet lag and circadian rhythms, zeitgeists, controversies over evolution and the age of the earth, and the relationships between economic and political cycles, religious revivals, and retro movements in the arts. Prerequisite: Rising Junior

### HUMA-1600 Readings From Western Cultures

An examination of persistently contested ideas in the history of Western cultures, focusing on the intellectual heritage of the Greco-Roman and Judeo-Christian strands of Western history. Involves readings from primary texts, discussion of ideas in the texts both orally and in writing, and instruction in analytical and argumentative writing. Huma 1600 combines sections of First-Year Seminar and Writing Workshop into an integrative academic experience with one common theme, syllabus, and readings (Also listed as GNED 1300 and ENGL 1302).

### GNED-2101 Chaos, Theory, and Careers

This course is designed to help participants identify their strengths as liberal arts students and develop the professional skills necessary for meaningful pursuits after Trinity. The four central components of the course are: (1) career development theory; (2) personal assessment of values, interests and skills; (3) exploration of career and vocational options; and (4) professional skill development. By the end of this course students will be able to conduct effective job and internship searches and respond to a changing world utilizing their liberal arts education. (Offered every Spring)

### HUMA-2301 Great Books in Western Modernity

An examination of persistently contested ideas in the history of Western cultures, concentrating on the intellectual

heritage of the post-classical world (from the Renaissance to the present). Involves readings from the primary texts (literary, religious, philosophical, and political) and discussion of ideas in the texts both orally and in writing. All sections share common theme, syllabus, and readings.

### HUMA-3402 Texts on Trial: Literature, Law, and Justice

An examination of the interrelationship between literature and law, as well as a comparison of the ideologies that underlie both literary and legal studies. Primary texts will include literary portrayals of the law and its systems; texts will represent a variety of genres, historical moments, and linguistic traditions. Legal texts may be also be included. (Offered every other year).

# Health Care Administration

## Faculty

[Brad M. Beauvais, Ph.D., FACHE](#) , Assistant Professor

[Amer A. Kaissi, Ph.D.](#) , Professor

[Jody R. Rogers, Ph.D.](#) , Visiting Professor

[Edward J. Schumacher, Ph.D.](#) , Professor; Chair

[Patrick Shay, Ph.D.](#) , Assistant Professor

## Overview

The Department of Health Care Administration offers an M.S. degree only, and does not have an undergraduate major. The department does offer, however, three undergraduate courses. HCAD 3333 (Health Economics) and HCAD 3350 (The U.S. Health Care System) fulfill a Common Curriculum requirement for Understanding Human Social Interaction: Social Issues and Values. HCAD 3383 (Management of Health Care Organizations) is cross-listed with MGMT 3383 and can be applied towards a Management concentration in Business Administration.

## Requirements

- [On-Campus Program](#)
- [Admission Requirements](#)
- [Course of Study](#)
- [Executive Program](#)
- [Typical Course of Study in the Executive Program in Health Care Administration](#)

## On-Campus Program

The graduate program in Health Care Administration is designed to promote the development and refinement of the conceptual, interpersonal, and technical skills necessary for understanding individual and community health problems, for effective planning for and management of health care organizations and institutions, and for leadership in the community at large. A detailed description of the On-Campus Program can be found at the department's website.

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## Admission Requirements

Any undergraduate major is carefully considered. The following items are required for admission to the program: completed application for admission to graduate study and a \$50 application fee, official transcripts from all colleges previously attended, aptitude test scores from the Graduate Record Examination (GRE) or Graduate Management Admission Test (GMAT), autobiographical sketch of educational and employment background, a brief statement of purpose indicating specific reasons for selecting a career in health care administration, and two letters of recommendation from individuals who are familiar with academic and/or employment performance. For optimal consideration, applicants are encouraged to apply by May 1.

The department also requires that applicants complete three prerequisite courses. These are three-hour undergraduate courses in accounting, economics, and statistics. In general, the pre-requisites should be completed in advance of the student's registration. An applicant may fulfill the requirements in one or more of the following ways:

- I. Completion of three-hour undergraduate level courses in each of the three subject areas with a grade of A or B. (C grades will be evaluated on an individual basis.)
- II. Individual petition to the Admissions Committee for any exceptions.

An advance deposit of \$200, which will be applied toward tuition, is required of applicants who have been accepted for admission. Checks should be made payable to Trinity University and directed to the Health Care Administration Department. Consult the Tuition and Fees section for details.

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## Course of Study

A Master of Science in Health Care Administration will be conferred by Trinity University upon completion of a course of study that includes 16 months of on-campus study and an administrative residency, usually of 12 months. A class is admitted in the fall semester. Degree requirements may be met under either a thesis or non-thesis alternative. Each plan requires 50 credit hours during the on-campus portion of the program, but the non-thesis alternative substitutes 6 hours of coursework for 6 hours of thesis credit. Both plans require an administrative residency that carries 6 hours of graduate credit. The specific courses for either of these plans shall be determined by the student's adviser and Chair of the Department of Health Care Administration after

consideration of the student's academic background and experience.

The following courses are recommended:

HCAD 5101	Seminar in Professional Development for Health Care Executives
HCAD 5102	Physicians and Physician Relations
HCAD 5220	Statistical Analysis in Health Care Organizations
HCAD 5221	Operations Management in Health Care Organizations
HCAD 5290	Problems: Clinical Decision Making
HCAD 5310	Health Services Organization and Policy I
HCAD 5311	Health Services Organization and Policy II
HCAD 5313	Economic Aspects of Health Care Administration
HCAD 5330	Health Care Organization Theory and Management
HCAD 5333	Legal Aspects of Health Care Administration
HCAD 5340	Health Care Strategic Planning and Marketing
HCAD 5350	Seminar in Current Health Care Issues
HCAD 5351	Financial Management
HCAD 5365	Leadership and Conflict Management
HCAD 5373	Health Administration Ethics
HCAD 5380	Health Care Human Resource Management
HCAD 5383	Health Care Institutional Management
HCAD 5387	Health Information and Data Analytics
HCAD 5390	Problems: Performance Improvement in Health Care Organizations
FNCE 5351	Financial Analysis for Decision Making

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## Executive Program

Trinity University's Health Care Administration Executive Program is designed to meet the educational needs of those individuals currently holding responsible positions in a health care organization. The Executive Program is a part-time, distance-learning experience designed for individuals employed full-time in the health care field. Because students must have prior management-level experience, the program fosters learning opportunities that integrate the theory and principles of health care administration with the richness of each participant's practice setting. A

detailed description of the Executive Program can be found at the [department's website](#).

The program requires 23 months to complete 41 credit hours. Students register for two to three courses (two to three credit hours each) in each of the fall, spring, and summer semesters. Each semester begins with a three- to four-day intensive on-campus session followed by home study and supplemented by regular teleconferencing or webinar sessions.

The following items are required for application to the program: completed Trinity University Graduate application, completed departmental application, a \$50 application fee, official transcripts from all previous colleges attended, including evidence of a baccalaureate degree from an accredited institution, a resume, a brief statement of purpose indicating the applicant's reasons for selecting a career in health care administration, and two letters of recommendation from individuals who are familiar with the applicant's academic and/or employment performance. The general deadline is July 1.

Provisional admission will be considered if the grade point average on the last 60 hours of undergraduate course work is less than 3.0. Admission to the Executive Program assumes the applicant has basic knowledge of accounting, statistics, and economics. Competency in computer spreadsheet applications (e.g., Excel) is strongly encouraged prior to enrolling. An on-campus interview is required.

Trinity University regulations permit transfer of up to twenty percent of the total degree requirement of appropriate graduate credit from an accredited institution after satisfactory completion of 12 credit hours at Trinity University. Graduate courses taken at another accredited university will be transferred in accordance with the policies stated in the Trinity University *Courses of Study Bulletin*.

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## Typical Course of Study in the Executive Program in Health Care Administration

### First Year

#### Fall Semester

HCAI 5220	Statistical Analysis in Health Care Organizations
HCAI 5221	Operations Management in Health Care Organizations
HCAI 5330	Health Services Organization and Policy Spring Semester

#### Spring Semester

HCAI 5231	Health Care Organization Theory and Management
HCAI 5223	Information Technology
HCAI 5301	Managerial Accounting

## Summer Semester

HCAI 5353	Financial Management for Health Care Administration
HCAI 5340	Managerial Epidemiology

## Second Year

### Fall Semester

HCAI 55313	Economic Aspects of Health Care Administration
HCAI 5390	Problems: Performance Improvement

### Spring Semester

HCAI 5351	Seminar in Strategic Management of Health Services
HCAI 5360	Leadership Effectiveness
HCAI 5356	Seminar in Strategic Planning and Marketing

## Summer Semester

HCAI 5333	Legal Aspects of Health Care Administration
HCAI 5380	Health Care Human Resource Management

The Degree of Master of Science in Health Care Administration is conferred by Trinity University upon completion of all coursework.

## Courses

### Undergraduate

#### HCAD-3333 Health Economics

An introduction to the application of the tools of microeconomics to issues in the organization, delivery, and financing of health care. Economic analysis will be utilized to better understand critical issues in health care such as the level and growth of health expenditures, the role of the government versus the private sector in financing care, the relationship between doctors, hospitals, insurance providers, patients, and employers, and the role of society in providing for the uninsured. (Also listed as ECON 3333.) Prerequisite: ECON 1311 or consent of the instructor.

## HCAD-3350 The U.S. Health Care System

The course examines the development, organization, and evolution of the U.S. Health Care System and analyzes the impacts of major changes in that system on the values and behavior of both consumers and providers of health care services. Special emphasis is placed on the influence that our nation's second largest "business" has in contemporary society, and on the human consequences of that influence. Prerequisite: Junior standing.

## HCAD-3383 Management of Health Care Organizations

This course provides the unique knowledge and skills necessary to understand and effectively manage individuals and groups in challenging health care organizations such as hospitals, medical group practices, and nursing homes. The focus is on developing a theoretical and practical approach to managerial functions as related to dealing with health care professionals and workers, developing a conceptual understanding of the health care system in which the organization operates, and understanding the relationship between the organization, its regulatory environment, and the reimbursement system. Case studies are used to provide real-world applications relevant to health care management. (Also listed as MGMT 3383) Prerequisite: Junior Standing.

## HCAD-3-91 Special Topics

Special topics or contemporary issues in health care administration, including new forms of health services organization, management, delivery, or financing. Permission of the instructor is required. May be repeated on different topics.

# Health Care Administration Courses

## HCAD-5101 Seminar in Professional Development for Health Care Executives

This course is designed to introduce students to the professional requirements associated with being a health care executive. Students will be introduced to the behavior, dress, demeanor, and expectations of health care administrators. In addition, students will be introduced to the professional competencies so important to an executive's success in today's health care environment.

## HCAD-5102 Physicians and Physician Relations

This course is designed to introduce students to the various roles and responsibilities that physicians assume in the health care system. Topics will include physician education, physician culture, physician practice patterns, physician executives, and the management of physician practices. Special emphasis will be on strategies to foster effective relationships between physicians and health care management.

## HCAD-5202 Clinical Decision Making



This course will introduce Health Care Administration students to the nature of clinical process and decision-making in clinical care. The course will provide context for understanding the relationship between and among clinicians in the rendering of care to patients. We will explore the nature of clinical care itself. Specifically, following the model of case-based learning, and by participating in clinical presentation and analysis, administrators will gain an understanding of the process, priorities, motivations, strengths, and limitations of clinical decision-making. Administrators will also broaden their knowledge of and fluency in clinical terminology and communication. (Offered every Fall. )

### HCAD-5220 Statistical Methods in Health Care Organizations

This course covers topics in basic statistical analysis designed to assist the future health leader in understanding and interpreting data and in the role of decision maker. The course covers the collection, aggregation, and presentation of data and basic descriptive and inferential statistics. Students will get hands-on instruction in the application of spreadsheets and statistical software to the solution of various statistics problems.

### HCAD-5221 Operations Management in Health Care Organizations

Applications of operations research techniques to health care planning, control, and decision making including, deterministic and random models, mathematical programming, queuing, simulation, forecasting, and quality improvement. Emphasis is placed on model formulation and computer solution of decision models.

### HCAD-5310 Health Services Organization and Policy

An overview of the organization, delivery, financing, and evaluation of the U.S. health care system. Emphasis is on major system components and their inter-relationships. Key concepts include: social values, health personnel, health facilities, major financing mechanisms, and health policy.

### HCAD-5311 Policy, Population and Innovation

An exam in at ion of policies in the U.S. health care delivery system addressing efforts to promote and manage the health of populations and communities. Emphasis is on innovation and creative approaches to addressing population health challenges. Key concepts include: population health management, managerial epidemiology, disease management, and design thinking. (Offered every Spring.) Prerequisite: HCAD 5310

### HCAD-5313 Economic Aspects of Health Care Administration

Application of economic concepts to the health care sector. Demand and supply, elasticity, health insurance, regulation, competition, and cost-effectiveness analysis. Emphasis on use of economic analysis for strategic planning.

### HCAD-5330 Health Care Organization Theory and Management

Cases, concepts, and research findings in health care organizational behavior and administration. Analysis of the impact of individuals, groups, organizational structure, and environment on management performance. Instruction on formulating organizational strategy.

### HCAD-5333 Legal Aspects of Health Care Administration

The legal principles and processes influencing health care providers. Basic instruction in contract law and tort law. Focus on major health care liability producing areas and interface between law and ethics.

### HCAD-5340 Health Care Strategic Planning and Marketing

An analysis of the strategic planning and marketing processes used by health care managers. The processes examined include the uses of strategic planning models and marketing methodologies as they apply to patients, physicians, and managed care buyers as separate markets for health care services.

### HCAD-5350 Seminar in Current Health Care Issues

This is an integrative seminar where current topics in health care administration are examined in a broad context. Skills and knowledge introduced earlier in the curriculum are used to analyze current health care issues, and special efforts are made to include the perspective of practitioners.

### HCAD-5351 Financial Management I

The objective of this course is to develop an understanding of the interrelationships of strategy and financing within health care organizations from the management perspective. Upon completion of the course, the individual should be able to effectively read, interpret, and analyze the financial position of an organization and its components as well as develop and conduct presentations of financial material and respond to questions of a financial nature. Emphasis will be placed on analysis of finance and accounting data in the health care setting in support of organizational decision making. (Offered every Spring).

### HCAD-5353 Financial Management II

Financial management concepts and techniques, with particular attention to differences between for-profit and not-for-profit organizations and regulatory constraints in the health care sector. Topics include: ratio analysis, cost accounting, rate setting, capital budgeting, sources of financing, cash management, variance analysis, and current issues. (Offered every Fall)

### HCAD-5360 Seminar in Contemporary Issues

Contemporary issues in health care administration including new forms of organization for health services delivery, financing of health care, and increased governmental regulation of health services. May be repeated on different topics.

## HCAD-5361 Seminar in Contemporary Issues

Contemporary issues in health care administration. including new forms of organization for health services delivery, financing of health care, and increased governmental regulation of health services. May be repeated on different topics.

## HCAD-5365 Leadership and Conflict Management

An introduction to leadership and conflict management theories, models, and practices within health care organizations. Areas to be covered include leadership models and theories common to organizations delivering health care services, styles and their application in the health care industry, methods and techniques that can be used to manage conflict within organizations, and exposure to current trends and conceptual models of leadership and conflict management.

## HCAD-5373 Health Administration Ethics

An analysis of health care issues through lecture, case study, and practitioner involvement. Emphasis on overseeing the moral mission of health institutions while at the same time maintaining the economic viability of those institutions.

## HCAD-5380 Health Care Human Resources Management

Analysis of health manpower; professional, technical, and continuing education; credentialing; and emerging directions in strategic human resource management. The recruitment, selection, compensation, retention, and performance evaluation of health manpower; the role of independent contractors of services; and the impact of federal legislation such as NLRA, FLSA, OSHA, EEOA, and ERISA.

## HCAD-5383 Health Care Institutional Management

The organization and management of health care institutions in an era of change in the health care system. The course covers the major systems in organizations delivering health care service, involving organizational design, governance, executive functions, clinical systems, and support systems.

## HCAD-5385 Quality Control Management in Health Care Administration

Conceptual framework and practical tools for measuring and improving the quality of care in health care settings; role of JCAHO and other regulators in quality assurance; the organizational setting of quality management functions; cost/quality relationships; and patient and consumer involvement in quality improvement functions.

## HCAD-5387 Health Information and Data Analytics

This course deals with the role of health information in two ways. The first is to provide a survey of the history and

current status of management information systems in health services, including electronic medical records, health information exchanges, and clinical decision support tools. Current and proposed policy surrounding health information systems is also covered. Next, the course gives the students exposure to advanced Excel and other data management software. The focus is on how to convert data into information with an emphasis on how to display and present that information to a broad audience. (Offered every year).

## HCAD-5-90 Problems

Independent reading and research. Credit varies from 1 to 6 semester hours, based on the scope and depth of the proposed work. Prerequisites: 12 semester hours in health care administration and consent of instructor.

## HCAD-5395 Health Care Performance Improvements

This course provides an introduction to the fundamentals of guiding and sustaining health care organizational performance improvement, including the topics of leadership, culture, employee onboarding and engagement, customer relationship management, and contemporary performance improvement concepts, tools, and techniques. (Offered every Fall.)

## HCAD-6000 Thesis Renewal Administration

## HCAD-6099 Degree Requirements in Progress

## HCAD-6201 Administrative Residency

Field experience in a health care organization under the supervision of a selected preceptor and a university faculty member. The student is oriented to the total operations of the institution and participates in administrative activities in preparation for major administrative responsibilities. The preparation of three reports is required during the residency to demonstrate the integration and application of theory and management skills to practical problems of health care institutions.

## HCAD-6202 Administrative Residency

Field experience in a health care organization under the supervision of a selected preceptor and a university faculty member. The student is oriented to the total operations of the institution and participates in administrative activities in preparation for major administrative responsibilities. The preparation of three reports is required during the residency to demonstrate the integration and application of theory and management skills to practical problems of health care institutions.

## HCAD-6203 Administrative Residency

Field experience in a health care organization under the supervision of a selected preceptor and a university faculty member. The student is oriented to the total operations of the institution and participates in administrative

activities in preparation for major administrative responsibilities. The preparation of three reports is required during the residency to demonstrate the integration and application of theory and management skills to practical problems of health care institutions.

## HCAD-6300 Thesis Administration

# Health Care Administration Executive Program Courses

## HCAI-5220 Statistical Methods in Health Care Organizations

This course covers topics in basic statistical analysis designed to assist the future health leader in understanding and interpreting data and in the role of decision maker. The course covers the collection, aggregation, and presentation of data and basic descriptive and inferential statistics. Students will get hands-on instruction in the application of spreadsheets and statistical software to the solution of various statistics problems.

## HCAI-5221 Operations Management in Health Care Organizations

This course covers topics in basic applications of operations research techniques to health care planning, control, and decision making, including deterministic and random models, mathematical programming, queuing, simulation, forecasting, and quality improvement. Emphasis is placed on model formulation and computer solution of decision models.

## HCAI-5231 Health Care Organization Theory and Management

Cases, concepts, and research findings in health care organizational behavior and administration. Analysis of the impact of individuals, groups, and organizational structure and environment on management performance. The topics of power and leadership are covered in other required courses. Available only to two-year Executive Program students.

## HCAI-5233 Information Technology and the Management of Health Care Organizations

As information systems and information technology continue to evolve, health care managers must have a conceptual and operational understanding of the ways that technology can enhance both the delivery and management of health care services. This course will explore how health care organizations can utilize information systems and technology to integrate strategic management with clinical and web-based functions, assess organizational effectiveness, improve clinical care, and achieve patient safety goals.

## HCAI-5270 Health Administration Ethics

An analysis of health care issues through lecture, case study, and practitioner involvement. Emphasis on overseeing the moral mission of health institutions while at the same time maintaining the economic viability of

those institutions. Available only to two-year Executive Program students.

### HCAI-5301 Managerial Accounting

Concepts and techniques of managerial accounting for generalist health care administrators. Emphasizes managerial accounting applications for using financial data as a tool for management planning and decision making in health care. Topics covered include financial accounting, cost accounting, source of revenues, budgeting and control, pricing, and profitability determination. Available only to two-year Executive Program students.

### HCAI-5313 Economic Aspects of Health Care Administration

Application of economic concepts to the health care sector. Demand and supply, elasticity, health insurance, regulation, competition, and cost-effective analysis. Emphasis on use of economic analysis for strategic planning.

### HCAI-5330 Health Services Organization and Policy

An overview of the organization, delivery, financing, and evaluation of the U.S. health care system. Emphasis is on major system components and their inter-relationships. Key concepts include social values, health personnel, health facilities, major financing mechanisms, and health policy.

### HCAI-5333 Legal Aspects of Health Care Administration

The legal principles and processes influencing health care providers. Basic instruction in contract law and tort law. Focus on major health care liability producing areas and interface between law and ethics.

### HCAI-5340 Managerial Epidemiology

Managerial epidemiology is the application of the principles and tools of epidemiology to the decision-making process. It applies analytic techniques to the management of health services through the study and measurement of the health of populations. Topics include population health appraisals, determinants of health and disease, health status measurement, health service use, and design and evaluation of health care interventions. Available only to two-year Executive Program students.

### HCAI-5351 Seminar in Strategic Management of Health Services

This integrative seminar focuses on the management of health care organizations from a strategic perspective. The various tenets of strategic management will be explored and then applied to various health care organizations. Special emphasis is placed on organization responses to new trends and changing circumstances. Students will be expected to draw on skills and knowledge introduced earlier in the curriculum. They will also analyze and reflect on the individual Integrated Field Experience required prior to graduation. (Offered every Spring).

## HCAI-5353 Finance Management for Health Care Administration

Practical and theoretical aspects of the decision-making process in the financial management of health care facilities and systems. Topics include: price level problems; financial statement analysis and interpretation; evaluation of methods of hospital financing.

## HCAI-5356 Seminar in Strategic Planning and Marketing

This course is designed to provide knowledge and skills pertaining to the function of strategic planning, marketing, and business plans in the health care setting. These will be applied to the line or staff manager in the health care setting whose responsibilities center upon management functions other than an assignment as a planning or marketing specialist. This course only available to two-year Executive Program students. (Offered every Spring).

## HCAI-5360 Leadership Effectiveness

This course will analyze managerial leadership models and the exercise of power in the health care setting. These managerial concepts will be assessed for their effectiveness in guiding managerial behavior in professional-dominated organizations and in assisting health care managers in carrying out essential tasks dealing with conflict in organizations and effecting organizational change. This course available only to two-year Executive Program students.

## HCAI-5380 Health Care Human Resource Management

Analysis of health manpower; professional, technical, and continuing education; credentialing and emerging directions in strategic human resource management. The recruitment, selection, compensation, retention, and performance evaluation of health manpower; the role of independent contractors of services; and the impact of federal legislation such as NLRA, FLSA, OSHA, EEOA and ERISA.

## HCAI-5395 Health Care Performance Improvement

This course provides an introduction to the fundamentals of guiding and sustaining health care organizational performance improvement, including the topics of leadership, culture, employee onboarding and engagement, customer relationship management, and contemporary performance improvement concepts, tools, and techniques. (Offered every Fall.)

# Human Communication & Theatre

## Faculty

[Stacey Connelly, Ph.D.](#) , Associate Professor, Theatre

[Timothy Francis, M.F.A.](#) , Technical Director and Lighting Designer, Theatre

[Kyle Gillette, Ph.D.](#) , Associate Professor, Theatre; Director of Theatre

[Andrew Hansen, Ph.D.](#) , Associate Professor, Human Communication; Chair

[Rachel Joseph, Ph.D.](#) , Assistant Professor, Theatre

[Jodi Karjala, M.F.A.](#) , Costume Designer/Costumer, Theatre

[John McGrath, Ph.D.](#) , Professor, Human Communication

[William Mosley-Jensen](#) , Assistant Professor, Human Communication; Director of Debate

Scott Neale, M.F.A , Assistant Professor, Theatre

[Roberto Prestigiaco, M.F.A.](#) , Associate Professor, Theatre

Nathaniel Stith, Ph.D. , Assistant Professor, Human Communication

[Erin M. \(Bryant\) Sumner, Ph.D.](#) , Associate Professor, Human Communication

[Jamie Thompson, M.Ed.](#) , Director, Student Involvement

Amanda Zuckman, B.A. , Coordinator of Theatre Arts, Theatre

## Requirements

- [The Major](#)
- [The Minor](#)
- [The Honors Program](#)

## The Major

The requirements for the degree of Bachelor of Arts with a major in Human Communication or Theatre are as follows:

### I. Departmental requirements:

#### A. The Human Communication major consists of 30 credit hours to be taken as follows:

1. Required core consists of 15 credit hours.

a. Within Human Communication (12 credit hours):

HCOM 1300	Theories of Human Communication
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HCOM 2304	Interpersonal Communication
HCOM 3334	Persuasion
HCOM 3350	Rhetorical Criticism (also listed as ENGL 3334)

b. Select one of the following in quantitative research methods:

HCOM 3354	Quantitative Research Methods (also listed as COMM 3354)
BAT 2301	Statistics for Management and Economics
MATH 1320	Statistical Methods
PSYC 2422	Statistics and Methods I
SOCI 3460	Research Methods: Social Statistics

2. Controlled electives consist of 9 credit hours. At least 3 credit hours must be chosen from each of the following areas:

a. Public Communication

HCOM 1333	Public Speaking
HCOM 2140	Forensics
HCOM 3374	International Communication (also listed as COMM 3322)
HCOM 4350	Political Communication (also listed as PLSI 3304)
HCOM 4391	Special Topics in Public Communication

b. Rhetorical and Communication Theory

HCOM 2350	Classical Rhetorical Theory
HCOM 2352	Modern Rhetorical Theory
HCOM 3330	Argumentation
HCOM 3352	Rhetorical Analysis (also listed as ENGL 3335)

c. Communication and Social Context

HCOM 3360	Communicating in Small Groups and Teams
HCOM 3362	Organizational Communication (also listed as BUSN 3311)
HCOM 3364	Communication and Effective Leadership

3. General Human Communication Electives consist of at least 6 more hours of Human Communication courses to achieve greater focus in the major.

4. At least 18 hours of the Human Communication major must be upper-division coursework.

**B. The Theatre major consists of 37 credit hours to be taken as follows:**

1. Required core consists of 28 credit hours.

a.. Theatre Practicum (4 hours):

University Theatre Company	(four semesters for a total of four credit hours; at least one semester must be taken in THTR 1101)
THTR 1100	University Theatre Company I—Acting, directing, dramaturgy, choreography. May be repeated up to 3 times.
THTR 1101	University Theatre Company II—Construction, running crew, stage management, design. May be repeated up to 4 times.

b. Technology and Design (6 Hours):

THTR 1320	Introduction to Production Techniques <b>OR</b>
THTR 1330	Principles of Costume Technology
THTR 2310	Principles of Design <b>OR</b>
ART 1410	Design

c. Performance (3 Hours):

THTR 1350	Introduction to Acting
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d. Directing and Playwriting (6 Hours):

THTR 3340	Directing
THTR 3360	Playwriting

e. Literature and History of Theatre (9 hours):

THTR 2332	Play Structure and Analysis
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THTR 3331	History of Theatre I: The Classical Stage to the Theatre of the Enlightenment <b>OR</b>
THTR 3332	History of Theatre II: Romanticism to Performance Art
THTR 3337	Contemporary Theatre

f. 9 additional hours of Theatre electives of which no more than 3 credit hours of directed studies or special topic courses may be applied toward the required 37 hour major.

g. At least 18 hours of the Theatre major must be upper-division coursework.

h. Additional courses in Theatre may be taken, but not substituted for those listed to fulfill the major requirements.

**II. University requirements: completion of all other required elements of the Pathways curriculum and at least 124 credit hours.**

## The Minor

Two minors are available in the Department of Human Communication and Theatre. In both minors at least 9 hours must be upper-division coursework.

**Human Communication:** Minor consists of 18 credit hours to be taken as follows:

- I. 6 of the 18 hours must be selected from the required core of Human Communication courses for the major.
- II. 3 hours must be selected from each of the three controlled elective areas of the major.

**Theatre:** The Theatre Minor consists of 20 hours to be taken as follows.

- I. Required core consists of 11 credit hours.

THTR 1100	University Theatre Company I (two semesters for a total of two credit hours)
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An additional 9 hours to be selected from the following courses:

THTR 1304	Introduction to Theatre
THTR 1314	Introduction to Dramatic Literature
THTR 1320	Introduction to Production Techniques
THTR 1330	Principles of Costume Technology

THTR 1350	Introduction to Acting
THTR 2100	Stage Makeup Design
THTR 2310	Principles of Design <b>OR</b>
ART 1410	Design
THTR 2332	Play Structure and Analysis
THTR 2354	Vocal Performance for the Actor (also listed as HCOM 2313)
THTR 2356	Physical Performance for the Actor
THTR 3331	History of Theatre I: The Classical Stage to the Theatre of the Enlightenment <b>OR</b>
THTR 3332	History of Theatre II: Romanticism to Performance Art

II. 9 additional hours of Theatre electives of which no more than 3 credit hours of directed study or special topic courses may be applied.

## The Honors Program

### I. University Requirements

### II. Department requirements:

The Department of Human Communication and Theatre offers a major Honors Program in both Human Communication and Theatre. A description of the program is available in the departmental office.

## Courses

### Human Communication - Lower Division

#### HCOM-1104 Effective Listening

Effective listening is central to information exchange and the development of successful interpersonal relationships. This course will provide an opportunity to assess one's strengths and weaknesses and to develop the skills for more active listening behavior.

#### HCOM-1160 Parliamentary Procedure

An overview of modern parliamentary practice as set forth in the standard work on the subject, Robert's Rules of Order, most newly revised. Consideration will be given to the purpose and functions of parliamentary procedure, the types of assemblies that employ it, and the significant differences between the standard rules of procedure and the specialized rules utilized by legislative bodies.

### HCOM-1162 Interviewing

Examines the goals, techniques, and interpersonal dynamics of the interviewing process. This course focuses on communication skill development in employment, journalistic, counseling, appraisal, persuasive, and research interviews.

### HCOM-1170 Leadership Academy

Leadership Academy is a one-credit comprehensive leadership course for first-year and sophomore students. It is an experiential leadership course where students learn leadership essentials and explore how their leadership impacts others. The course requires individuals to explore their own leadership through theory-to-practice transformational leadership activities, small and large group discussions, and reflection. Leadership Academy concludes with a service project.

### HCOM-1300 Theories of Human Communication

Examines the concepts, principles, and applications of human communication theory and research with emphasis on the formats, roles, strategies, and constraints on human communication in varied social contexts.

### HCOM-1305 Foundations of Linguistics

Examines the foundations of human language including phonology, morphology, syntax, and semantics. (Also listed as LING 1300.)

### HCOM-1310 Applied Linguistics

Examines applications of linguistics in psycholinguistics (language acquisition and language processing), sociolinguistics (language development and change in groups and organizations), the interaction of language and culture, and analytical procedures (discourse and text analysis). (Also listed as LING 1310.)

### HCOM-1323 Oral Interpretation

Examines the performative and other critical approaches to the study of literature. Investigates and explores critical methods for analyzing texts and their application to the oral study and performance of a variety of literary genres. (Same as THTR 1306)

## HCOM-1333 Public Speaking

A basic course in the theory and practice of public speaking. Emphasizes the preparation and adaptation of messages for effective public presentation. Also addresses the development of critical thinking and listening skills. Not available for P/F option.

## HCOM-2133 Advanced Public Speaking

Allows student to extend public speaking skills by refining all aspects of the public presentation of their character and material. This course focuses on the creation and delivery of organized discursive presentations for a public and oral venue. Prerequisite: HCOM 1333 or permission of instructor.

## HCOM-2140 Forensics

Independent research and analysis as well as group brainstorming on issues involved in the current national policy debate resolution. Offered in conjunction with participation in the intercollegiate debate program. May be repeated for no more than six credits. Prerequisite: Admission by consent of instructor only.

## HCOM-2304 Interpersonal Communication

A basic course in the theory and practice of interpersonal communications with emphasis on intrapersonal concerns, development and maintenance of interpersonal relations through communication, and the practical skills necessary for interpersonal effectiveness.

## HCOM-2312 Nonverbal Communication

Nonverbal Communication is a course designed to familiarize students with theoretical concepts and research centered on the nonverbal aspects of meaning making. Nonverbal Communication refers to everything we use to communicate besides words themselves. This includes ways we use our voices, faces, bodies, and clothing, to create meaning, as well as the ways we use time, space, and touch. So much of communication happens in place of and alongside the use of language. Students will learn about these modes of communication as well as their evolutionary and social origins.

## HCOM-2313 Voice and Speech

Students will develop a foundation for voice work that focuses on freeing the instrument from tension as well as improving overall diction, articulation, tone, quality, and volume. By developing breath awareness and enhancing the responsiveness of the vocal resonating chambers, students will develop and strengthen their articulation, identify and address personal speech issues, and cultivate a free and expressive voice to address any audience. (Offered every year) (Also listed as THTR 2354).

## HCOM-2320 Human Communication and Human Relations

This course employs communication concepts, principles, and practices to develop students' abilities to understand, evaluate, and improve their interpersonal and group communication. Specifically, the course provides opportunities for students to understand more fully, critically reflect on, and enact alternatives to taken-for-granted interpersonal communication in dyadic and small group settings. To accomplish those goals, the majority of the class employs an experimental group method—an inductive form of learning in which students first participate in creating and then analyze and evaluate how the created high-quality interpersonal communication with other class members.

## HCOM-2330 Conflict and Human Communication

Conflict is an inevitable part of our daily lives, and occurs in multiple contexts. Many people view conflict as inherently destructive, yet this need not be the case. If handled correctly, conflict can serve as the basis for positive transformation and relational growth. This course will discuss how people can improve their communication skills to manage personal, professional, and social conflicts in a constructive manner.

## HCOM-2350 Classical Rhetorical Theory

Traces the emergence of rhetoric as a theory of public discourse developed by the Greeks and adapted by the Romans. Examines the works of such theorists as Plato, Isocrates, Aristotle, Cicero, and Quintilian.

## HCOM-2352 Modern Rhetorical Theory

Examines the evolution of rhetorical theory from the Renaissance to the present, focusing on the works of such leaders as Locke, Campbell, Richards, Burke, and Perelman. Also, studies associated movements such as epistemology, form and genre, and dramatism.

# Human Communication - Upper Division

## HCOM-3330 Argumentation

A study of the theoretical basis of argument as a rhetorical device for critical decision-making. Includes, but is not limited to, consideration of the types of propositions; questions of definition; uses of evidence; reasoning and delivery; and procedural issues including the burden of proof, and the nature of the decision to be made.

## HCOM-3332 Computer Mediated Communication and Social Relations

This course examines the role of computer-mediated communication in social relationships. Students will gain practical and theoretical understanding of how communication technologies (e.g., email, social media, and mobile

devices) are utilized to initiate, develop, maintain, and dissolve interpersonal and group communication. Additionally, students will gain knowledge regarding how traditional interpersonal communication concepts can be augmented to understand the increasingly mediated nature of social interaction. Such understanding will enable students to become more mindful regarding the positive and negative outcomes of using communication technology in such areas as constructing individual or multiple self-presentations, in managing interpersonal impressions and relations, in considering communication privacy, and in providing social support.

### HCOM-3334 Persuasion

Examines theory, research, and practice in persuasive communication with an emphasis on the interaction of rhetorical and social scientific approaches. Considers the development of strategies and tactics for application in various contexts, especially campaigns and social movements. Addresses ethical issues and questions throughout.

### HCOM-3350 Rhetorical Criticism

Examines approaches to the critical analysis of rhetorical discourse with emphasis on methodological issues as well as techniques for doing scholarly criticism.

### HCOM-3352 Rhetorical Analysis

Introduction to rhetoric as a mode of analysis as it applies to discursive modes and genres. (Also listed as ENGL 3335.) Prerequisite: at least one course in ENGL at the 2000-level or higher

### HCOM-3354 Quantitative Research Methods

This course provides an overview of quantitative research methods and statistical analysis. Students will learn the basic elements of social scientific inquiry, including: 1) quantitative research design and methodologies; and 2) statistical analysis and hypothesis testing procedures. Students will display their knowledge by applying quantitative research methods to help understand and predict social phenomena . (Also listed as COMM 3354.) (Offered every semester).

### HCOM-3360 Communicating in Small Groups & Teams

The Theory and practice of small group and team dynamics including the examination of such concepts as group problem solving; discussion making; normative behavior; roles; leadership; conflict; group cohesion; group climate; and teamwork.

### HCOM-3362 Organizational Communication

Studies the theory and practice of communication within organizations. Includes the fit of communication into organizational theory; communication climate and cultures; leadership and management styles; information



networking; and the diagnosis and evaluation of communication problems. (Also listed as BUSN 3311.)

### HCOM-3364 Communication and Effective Leadership

An examination of the theories and skills necessary for the development of effective communication and leadership. The course includes opportunities for evaluating leaders, leadership behavior and communication in a variety of civic and non-profit contexts.

### HCOM-3372 Intercultural Communication

Examines theory, research, and the application of communication in an intercultural context with an emphasis on verbal and non-verbal language variables; world view; acculturation; diffusion of innovation; and training for foreign assignments.

### HCOM-3374 International Communication

Studies communication as an essential component of international organizations and relations. Surveys major topics in international communication and emphasizes communication and international decision-making, comparative media systems and national philosophies, and Third World issues and policy development. (Also listed as COMM 3322.) Prerequisite: COMM 1301 or permission of instructor.

### HCOM-3398 Honors Reading

Independent study in selected areas in preparation for Honors Thesis. Prerequisite: Admission to Honors Program.

### HCOM-3-90 Directed Studies

Independent work under faculty supervision. The nature of the project will be agreed upon by the student and participating faculty member prior to registration. Credit varies from 1 to 4 semester hours, depending on the scope of the project. Prerequisites: 15 hours in the discipline of Human Communication, documentation of ability to undertake study, consent of instructor.

### HCOM-4340 Gender and Human Communication

Gender is both personal and social. It is personal because it infiltrates our daily lives; it plays an important part in our identities, our relationships, the goals we set for ourselves, the things we value, and the ways we communicate. Gender is social in that it exists in and is created and sustained by social interactions, positions, and roles, as well as by cultural discourses and institutions. In this course, we will seek out the ways that gender is communicated and the ways communication is gendered.

### HCOM-4350 Political Communication

Studies communication aspects of the political processes in a democratic society with an emphasis on contemporary political campaigns; presidential and congressional rhetoric; and less public forms of communication in the policy-making process. (Also listed as PLSI 3304.)

#### HCOM-4-80 Teaching Speech and Directing Forensics Activities

Through extra- and co-curricular study, this course examines the philosophy, methods, and problems of teaching speech communication. Emphasis is given to the administration of high school forensic programs, including debate, oratory, extemporaneous speaking, and oral interpretation. Credit varies from 1 to 4 semester hours, depending on responsibilities and/or scope of the project. Course may be repeated for a maximum of 6 credit hours. Prerequisite: 12 hours of Human Communication or consent of instructor.

#### HCOM-4-85 The Human Communication Peer Tutor

Functioning as a peer mentor in introductory human communication courses, students will examine the philosophy, methods, and challenges of teaching speech under the direction of the human communication instructor for the course. Credit varies from 1 to 3 semester hours, depending on responsibilities and/or scope of the project. Course may be repeated for a maximum of 6 credit hours. Prerequisite: 15 hours of Human Communication or consent of instructor.

#### HCOM-4-90 Directed Studies

Independent work under faculty supervision. The nature of the project will be agreed upon by the student and participating faculty member prior to registration. Credit varies from 1 to 4 semester hours, depending on the scope of the project. Prerequisites: 15 hours in the discipline of Human Communication, documentation of ability to undertake study, consent of instructor.

#### HCOM-4391 Special Topics in Public Communication

An in-depth study of special topics in public communication including, but not limited to, the Rhetoric of the Women's Movement, American Public Address, British Public Address, and Social Movement Rhetoric. May be repeated when subject varies. Maximum credit is six credit hours.

#### HCOM-4394 Seminar in Human Communication

A variable content seminar emphasizing selected topics in human communication theory, research, and/or application. May be repeated for credit with a different topic. Maximum credit is nine credit hours.

#### HCOM-4-97 Human Communication Internship

Supervised on- and off-campus experience in human communication appropriate to the student's specialty. Specific guidelines are available in the departmental office. Credit varies with responsibilities. May be repeated for

a maximum of six hours of credit. Prerequisites: 12 semester hours of Human Communication coursework and permission of instructor.

### HCOM-4398 Honors Readings

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by senior Honors students in both semesters of their senior year.

### HCOM-4399 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by senior Honor students in both semesters of their senior year.

## Theatre - Lower Division

### THTR-1100 University Theatre Company I

Course focuses on specific responsibilities assigned by faculty and staff regarding University Theatre Productions. Included are performance, assistant directing, dramaturgy, choreography, and a weekly course meeting. May be repeated for three credit hours. Students working in University Theatre Productions who are neither theatre majors nor minors are encouraged to enroll in THTR 1100 but are not required to do so.

### THTR-1101 University Theatre Company II

Course focuses on specific responsibilities assigned by faculty and staff regarding University Theatre Productions. Included are performance, construction, running and operating crews, assistant stage management, and a weekly course meeting. May be repeated for four credit hours. Students working in University Theatre Productions who are neither drama majors nor minors are encouraged to enroll in THTR 1101 but are not required to do so.

### THTR-1154 Dance for Theatre

Dance for theater is for students of various levels of expertise in dance, ranging from beginner to advanced, to acquire and polish their skills and convey character through dance. The topic varies based on production needs within the department, but all courses will be primarily skill-based and performance oriented, with short choreography and dance appreciation segments. Topics may include: jazz, tap, modern, ballet, choreography, and other pertinent dance forms. Course is repeatable for up to six credit hours.

### THTR-1304 Introduction to Theatre

A hands-on approach to the fundamentals of theatre including literature, acting, directing, and design. Intended as

a survey, this course will provide an overview of theatre's numerous components, from the page to the stage, so that the beginning student may better understand the theatrical world.

### THTR-1306 Oral Interpretation

Examines the performative and other critical approaches to the study of literature. Investigates and explores critical methods for analyzing texts and their application to the oral study and performance of a variety of literary genres. (Same as HCOM 1323)

### THTR-1314 Introduction to Dramatic Literature

A survey of dramatic literature in the western canon from Ancient Greeks to the contemporary era. Students will read and discuss a significant number and range of plays in their theatrical, social, and cultural contexts.

### THTR-1320 Introduction to Production Techniques

Introduction to traditional stagecraft, including backstage organization, scenery construction, theatrical lighting, sound design, scene painting and drafting. May be taken instead of THTR 1330 as core credit towards the major.

### THTR-1330 Principles of Costume Construction

An introductory course that explores the fundamentals of costume construction, patterning and draping, textiles, and related crafts such as millinery and fabric painting and dyeing. May be taken instead of THTR 1320 as core credit toward the major.

### THTR-1343 Improvisation

This course teaches students to increase spontaneity and intuition. Students will practice generating scenes and creating hypothetical worlds without scripts or pre-planning. Using exercises drawn from theatre as well as from music, visual art, storytelling, writing, extemporaneous speaking, and dance, students will learn to develop the spontaneous aspects of creativity and to collaborate effectively with peers.

### THTR-1350 Introduction to Acting

This class will provide the beginning acting student with basic acting techniques and vocabulary through exercises, monologues, and scene work. (Not available for P/F option.) Students may not receive credit for both THTR 1350 and 1352.

### THTR-1352 Acting I

This class will provide acting students with a core of techniques from which to further develop their acting skills as

individuals and as members of a theatrical ensemble. The course is suggested for students planning to major in Theatre. Open to all students by audition or permission of instructor. (Not available for P/F option.) Students may not receive credit for both THTR 1350 and 1352.

### THTR-2100 Stage Makeup Design

Introductory course that studies the theory and practice of makeup design and application for the stage, including the creation of special effects.

### THTR-2301 American Musical Theater

Studies of the source materials, stage and film adaptations, and integration of musical and dramatic elements that led to the development of the Broadway musical as an American tradition. (Also listed as MUSC-2301).

### THTR-2310 Principles of Design

This course is an experiential introduction to the art of design. Students explore 2-D and 3-D compositional problems and practice integrating visual elements with aesthetic principles to communicate creative solutions. Students may not receive credit for both ART 1410 and THTR 2310.

### THTR-2312 Experiential Design

Experiential Design is a discussion and projects based course which studies the various interactive, immersive and experience based attractions that utilize theatre design as a basis. This includes theme parks, public art, museum exhibits, escape rooms, tradeshow and corporate events, and retail. Students will develop analytical and interpretive skills for devising environments that portray storylines to guests, customers, and audiences, while stressing research skills. We will also explore different methods of design presentation as a means to communicate one's visual interpretation of design ideas through sketching, collage making, Sketchup models and Photoshop. Basics tutorials for computer software will be given in class. Each student will be expected to develop basic creative communication and collaboration, research, sketching, collaging and presenting skills. Classes will be a combination of lectures, discussions, in class Studio work, and critiques. Through class presentations and discussions of their work, as well as evaluating choices made by the professional designers, students will develop skills for critical evaluation of their own work and that of others. Completion of THTR 2310 is recommended but not required. (Offered every Spring.)

### THTR-2314 Principles of Stage Lighting

An introductory course that explores the use of light as an artistic medium in theatrical productions. This overview course acquaints the students with the equipment, design elements, and conceptual processes employed in lighting design.

## THTR-2332 Play Structure and Analysis

This course will introduce students to multiple theatrical models and methods used to understand dramatic structure and to analyze specific plays. This course seeks answer to the question: How can we discover the ways in which plays work? (Also listed as GRST 2332)

## THTR-2340 Creative Thinking and the Artistic Process

This course encourages students to synthesize a theoretical and experimental approach to the creative process as studied through the visual arts, music, creative writing, and theatre. Students enter into the creative process as a means to develop creative self-expression, aesthetic sensibility, and an understanding of the arts. The nature and drive of artistic endeavor is explored through studies of the lives of significant thinkers and artists, examinations of art works, guests lectures, and projects. Students will engage in activities and projects that will enable them to access and develop their own creative thinking skills in concert with traditional, analytic modes. (Also listed as ART 2314, GNED 2340, ENGL 2340, and MUSC 2340.)

## THTR-2352 Acting II: Scene Study

This course will focus on scene work from a variety of periods and playwrights, and in class exercises to further develop the acting student's ability. (Also listed as GRST 2352) Prerequisites: THTR 1350 or 1352, and at least Sophomore standing or permission of instructor.

## THTR-2354 Voice and Speech

Students will develop a foundation for voice work that focuses on freeing the instrument from tension as well as improving overall diction, articulation, tone, quality, and volume. By developing breath awareness and enhancing the responsiveness of the vocal resonating chambers, students will develop and strengthen their articulation, identify and address personal speech issues, and cultivate a free and expressive voice to address any audience. (Offered every year). (Also listed as HCOM 2313).

## THTR-2356 Physical Theatre Laboratory

Drawing together movement, dance, text, mask, song, fiction, and design, students will develop a creative vocabulary that will lay the foundation of a physical approach to theatre. By recalling the traditional popular theatre forms of commedia dell' arte and clowning, as well as mask performance and puppetry, the students will explore the creation of a performance which breaks the boundaries of individual disciplines.

# Theatre - Upper Division

## THTR-3301 Theatre Graphics

An examination of current graphic techniques used to communicate designer concepts for the theatre and related fields, which include perspective drawing for the stage, costume drawing, scenic and costume rendering, and an understanding of selected computer-assisted design softwares.

### THTR-3311 History of Dress & Style

A study of the evolution of western dress from the Greeks to the present, focusing on how, within each era, the social, political, and cultural environment shaped the fashions of rich and poor. In the course of the semester, students will learn how sex, politics, and self-expression have influenced dress throughout the ages.

### THTR-3312 Costume Design

Costume design for theatrical productions. This course acquaints the student with the artistic techniques and principles used to create costume designs. Students will analyze play scripts in terms of their dramatic components and visual environment and use this information to create appropriate theatrical costume designs. Emphasis is placed on the visual interpretation of literary works using character study, period research, and script analysis. Prerequisite: ART 1310 or THTR 2310 or consent of instructor.

### THTR-3313 Scene Design

Rooted in the discipline of theatre, this course explores the art of conceptualization, visualization, and creativity. Problem solving activities include the use of metaphor to communicate literature for live performance, the creation of sculptural installations for plays and poetry, and the management of scenic design projects. The course examines the various means necessary to communicate a design to a producer, director, or client (sketching, drafting, painter elevations, and model making). Prerequisite: ART 1310 or THTR 2310 or consent of instructor.

### THTR-3215 Design Project

Students design costumes, lights, or scenery which is actualized in a university mainstage production Admission to course by consent of Theatre Faculty and Staff.

### THTR-3315 Theatrical Scene Painting

A study of color theory, scenic techniques, and painting styles introducing the student to the art of theatrical scene painting.

### THTR-3320 Advanced Production Techniques: Computer Aided Design

Course will explore the increasing use of computer technology in the theatrical production. The course will acquaint the student with computer aided drafting, computer control of theatrical lighting, computer control and manipulation of sound for the theatre, and computer control of mechanized scenery. The course will also explore the potential integration of these systems. Prerequisite: THTR 1320 or consent of instructor

## THTR-3227 Stage Management Project

Provides the students with the opportunity to stage manage a university theatre production. Admission to course by consent of the Theatre Faculty and Staff.

## THTR-3330 Dramaturgy

Dramaturgy combines advanced play analysis with writing, production research, collaboration with directors, and the presentation of written and visual materials to enhance a theatre company's and audience's understanding and appreciation of a dramatic text. Prerequisite: THTR 2332

## THTR-3331 History of Theatre: The Classical Stage To the Theatre of Enlightenment

This course explores the development of Western Theatre, covering Greek, Roman, medieval, Renaissance, and Enlightenment theatre and drama. Using historical and critical writings, dramatic texts, photography, and video resources, the course analyzes theatrical movements in their historical, aesthetic, and social context. (Offered every Spring.)

## THTR-3332 History of Theatre II: From Romanticism To Performance Art

This course explores influential developments in theatre of the past two centuries, including romanticism, melodrama, realism, futurism, dada, expressionism, epic theatre, Broadway and West End musicals, American family drama, regional repertory theatres, international theatre festivals and late twentieth century experimental performance art. Using historical and critical writings, dramatic texts, photography and video resources, the course analyzes theatrical movements in their historical, aesthetic, and social contexts. (Also listed as GRST 3332) (Offered every Spring).

## THTR-3335 Greek and Roman Drama

Study of trends in Greek and Roman dramatic literature, with attention to social, cultural, and political contexts. Topics will include the development of dramatic conventions and traditions of reception and performance. (Also listed as CLAS 3303) Prerequisite: Sophomore standing or consent of instructor

## THTR-3336 Modern Theatre

Study of trends in dramatic literature from Realism to the present.

## THTR-3337 Contemporary Theatre

Study of trends in dramatic literature from World War II through the present as manifested in the United States, Great Britain, Europe, and representative Third World Countries.



## THTR-3340 Directing

This course will teach and develop the skills necessary for directing. These include: reading a script, casting, rehearsing, and staging. Class time will be divided between lecture/discussion and presentation of student prepared scenes.

## THTR-3342 Stage Management

A study of the art of stage management, from the organizational paperwork to the running of a theatrical production. This course examines the necessary project management skills to communicate effectively with producers, directors, actors, designers, and technical staff. This class will identify and discuss the various responsibilities of theatrical stage managers and effective stage management techniques. Students will understand the working relationships with other theater professionals and unions, and learn proper stage management procedures for Trinity University Theater and other theater organizations.

## THTR-3343 Arts Management

Principles of Art Management is an introductory course designed to acquaint students with essential behind-the-scenes and administrative responsibilities necessary for theater, opera, and museum management. The course is recommended for Business, Theater, Art and Music majors who are interested in understanding professional opportunities beyond performance. The course will also introduce to Business and other majors new venues and opportunities where their talents and interests may be applied.

## THTR-3352 Advanced Acting: Verse Drama

Verse Drama offers the advanced student scene work in plays from Classical antiquity, Elizabethan drama, Seventeenth Century drama, and other verse dramas from various periods and styles. Exercises explore scansion, rhyme, and period movement. Prerequisites: THTR 1350 or THTR 1352 and THTR 2352

## THTR-3353 Advanced Acting: Non-Realistic Drama

Non-realistic Drama offers experience in acting scenes from non-realistic texts from nineteenth and twentieth-century European and American drama. Course includes exercises in voice, movement, and performance theory/art. Prerequisites: THTR 1350 or THTR 1352 and THTR 2352

## THTR-3354 Stage Dialects

Students learn to use International Phonetic Alphabet (IPA) as an effective tool for identifying individual sounds of speech. This knowledge improves articulation, contributes to the development of good Standard American Speech, and provides the actor with an ability to play a range of performance roles. The course employs the use of visual and audio technology as well as phonetics to analyze, create, and perform stage dialects.

## THTR-3355 Theater for Social Change

Theater for Social Change investigates the critical issues and creative process that chart the field of community-based theater. The critical investigation is framed by the following questions: What happens when theater gets into the community? How might we define "community"? Can theater stimulate political and social change? What is the role of the artist in relationship to the community? How can performance serve raise consciousness? The collaborative creative process will primarily draw upon August Boal's work and will consist of learning exercises taken from the Image Theater, Invisible Theater, and Forum Theater. This is a participatory and hands-on course.

## THTR-3360 Playwriting

This course investigates and practices systematic methods for developing dramatic ideas and turning them into dramatic literature through readings, discussions, and exercises. Each student will, at the end of the semester, have written a one-act play.

## THTR-3377 Reimagining Tragedy

This course explores the historical evolution and interpretation of classical and contemporary tragedy with a special emphasis on creativity as an interpretative tool. This course will feature performance, adaptation, and design as an integral part of the analysis and discussion of the dramatic texts. Texts and authors to be covered include Euripides, Sophocles, Seneca, Shakespeare, Anouilh, and O'Neill. (Also listed as THTR 3377.) (Offered every other year.)

## THTR-3-90 Directed Studies

Independent work under faculty supervision. The nature of the project will be agreed upon by the student and participating faculty member prior to registration. Credit may vary from 1 to 3 hours depending on the scope of the project. Maximum credit three hours. Prerequisites: 15 hours in Theatre, documentation of ability to undertake study, consent of instructor.

## THTR-3-97 Theatre Internship

Supervised off-campus experience in theatre production and/or management appropriate to the student's specialty. Credit varies with responsibilities, but maximum is three credit hours.

## THTR-3398 Honors Readings

Independent study in selected areas in preparation for Honors Thesis. Prerequisite: Admission to Honors Program.

## THTR-4215 Design Project

Students design costumes, lights, or scenery which is actualized in a university mainstage production. Admission

to course by consent of the Theatre Faculty and Staff.

### THTR-4227 Stage Management Project

Provides the students with the opportunity to stage manage a university theatre production. Admission to course by consent of the Theatre Faculty and Staff.

### THTR-4340 Directing II

Builds on the fundamentals studied in Directing I to explore further the process of directing for the theatre, from image to context to created word. Special attention will be paid to working with essential elements of the stage, and developing resources into a created space of interaction. Image, time, space, text, character, relationship, rhythm, sound, will all be addressed as means of creating theatrical environment. The course is taught through practical work and developed presentation of short dramatic pieces. Prerequisite: THTR 3340 or consent of instructor.

### THTR-4-85 The Theatre Peer Tutor

Functioning as a peer mentor in introductory theatre courses students will examine the philosophy, methods, and challenges of teaching theatre arts under the direction of the theatre instructor for the course. Credit varies from 1 to 3 semester hours, depending on responsibilities and/or scope of the project. Course may be repeated for a maximum of 6 credit hours. Prerequisite: 15 hours of Theatre or consent of instructor.

### THTR-4-90 Directed Studies

Independent work under faculty supervision. The nature of the project will be agreed upon by the student and participating faculty member prior to registration. Credit may vary from 1 to 3 hours depending on the scope of the project. Maximum credit three hours. Prerequisite: 15 hours in Theatre, documentation of ability to undertake study, consent of instructor.

### THTR-4-91 Special Topics in Design

An in-depth study of select design topics. May be repeated once when subject varies. Maximum credit is six semester-credit hours.

### THTR-4-92 Special Topics in Performance

An in-depth study of select performance topics. May be repeated when subject varies. Maximum credit is six credit hours.

### THTR-4393 Capstone for Theatre Majors

Theatre majors with senior standing will create a portfolio of Theatre coursework and production experiences, research career opportunities for the potential application of this portfolio, and present this synthesis to the Theatre faculty, staff, and students. Applicable guidelines are available from Theatre advisors. Prerequisite: Senior status

### THTR-4-97 Theatre Internship

Supervised off-campus experience in theatre production and/or management appropriate to the student's specialty. Credit varies with responsibilities, but maximum is three credit hours. Prerequisite: 12 semester credits of Theatre coursework and consent of instructor

### THTR-4398 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by senior Honors students in both semesters of their senior year.

### THTR-4394 Seminar in Theatre

An in-depth study of selected plays, dramatists, and/or movements. May be repeated when subject varies. Prerequisite: Junior or Senior standing or consent of instructor

### THTR-4399 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by senior Honors students in both semesters of their senior year.

# History

## Faculty

[Anene Ejikeme, Ph.D.](#) , Associate Professor

[Jason Johnson, Ph.D.](#) , Assistant Professor

Erin Kramer, Ph.D. , Assistant Professor

[Carey H. Latimore IV, Ph.D.](#) , Associate Professor; Chair

[David Lesch, Ph.D.](#) , Ewing Halsell Distinguished Professor of History

[Kenneth Loiselle, Ph.D.](#) , Associate Professor

[Nicole Marafioti, Ph.D.](#) , Associate Professor

[Gina Tam, Ph.D.](#) , Assistant Professor

[Lauren Turek, Ph.D.](#) , Assistant Professor

## Requirements

### The Major

The requirements for the degree of Bachelor of Arts with a major in history are as follows:

#### **I. Departmental requirements:**

A minimum of 31 credit hours in history including:

- Four lower-division courses, including at least two 1000-level courses and at least one 2400-level seminar.
- Four 3000-level courses, at least two of which must be worth four credit hours.
- One 4400-level seminar that serves as the capstone course for the major.
- One course from each of these three areas: (a) United States history; (b) European history; (c) Asian, Middle East, Latin American, and African history.

#### **II. University requirements:**

Completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

## The Minor

The requirements for a minor in history are as follows:

- I. 18 credit hours in history.
  - II. At least 9 hours must be from upper division.
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## The Honors Program

### I. University Requirements

### II. Departmental requirements:

#### A. Admission to the program

1. 3.33 overall Trinity University G.P.A.
2. 3.66 average department G.P.A.
3. 3.66 average in the following courses:
  - A. HIST 3381: Historians and Their Craft
  - B. Seminar (HIST 4400, 4420, 4430, 4440, 4450, 4460, or 4470)
  - C. Two upper-division courses in the student's field of specialty
4. Applications will be made by May 5

#### B. Requirements

Successful completion of a senior thesis written in a fall and spring (HIST 4498, 4499).

*A full description of the program is available in the department office.*

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## Criteria for Social Studies 4-8 and 8-12 Certification

History Majors seeking certification in Social Studies 4-8 and Social Studies 8-12 must take HIST 3376, HIST 3388, and one course each from three of the following four fields: African History, Asian History, Latin American History, and Middle East History.

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## Courses

### Lower Division - African History

#### HIST-1300 The African Experience

This course introduces students to aspects of African history and their relation to contemporary issues. The approach is interdisciplinary and incorporates visual and literary documents. Topics may include the politics of antiquity, the trans-Atlantic slave trade, the historical development of Islam, Christianization, colonization and decolonization, with particular attention to West Africa and the Ethiopian region.

### Lower Division - Ancient Greece and Rome

#### HIST-1310 Ancient Greece and Rome

A historical introduction to selected aspects of the political, cultural, and intellectual life of the Greek and Roman world, with particular attention to the Greek and Roman contribution to western civilization.

#### HIST-1311 Gender and Identity in the Ancient World

An examination of the roles of women and men in society, religion, and culture of the ancient world. Readings will include historical, religious, medical, legal, philosophical, and literary texts. Representations of men and women in the visual arts will also be considered. (Also listed as CLAS 1307.)

#### HIST-1312 Greeks, Romans, and Barbarians

This course gives students an opportunity to examine the cultures and achievements of peoples labeled "barbarians" by the ancient Greeks and Romans. Students will use a broad selection of historical documents originating from the Near East, Egypt, Greece and Rome, as well as the results of archaeological research, for investigating the social structures and values of these cultures. Critical methods for interpreting ancient and modern evidence about these societies will also be discussed. Also listed as CLAS 1312.

### Lower Division - Asian History

#### HIST-1320 History of China

China from the bronze age through the communist revolution, with special emphasis on institutions, social and

family life, philosophy and religion, and the effects of revolution and modernization. Survey readings supplemented by primary sources and a research component.

## HIST-1324 Modern East Asia

A survey of the East Asian region since 1800 that addresses the modern histories of China, Japan, Korea, and Vietnam. The course begins with late traditional patterns and covers the stresses of imperialism and colonialism, the emergence of revolutionary independence movements, Communism, and the ordeals of war and economic modernization.

## Lower Division - European History

### HIST-1332 Medieval Europe

Europe from fall of Roman Empire through the 14th century; rise of Christianity; barbarian invasions; development of feudalism; rebirth of urban civilization and achievements of medieval culture. Attention to social and political developments and major thinkers of the period. Lecture and discussion format.

### HIST-1333 Medieval Christianity: Tradition and Transformation, 200-1200

This course will focus on the emergence, spread, and development of Christian religion and culture in western Europe between 200 and 1200. Topics may include: Christianity in the Roman Empire; missionary activity in the early Middle ages; biblical and theological writings; growth of the western Church and papacy; traditions of worship and belief, including saints' cults and monasticism; Christian kingship and holy war; and interactions with non-Christians and heretics.

### HIST-1334 Early Modern Europe (1500-1815)

Chief cultural and political developments from the Renaissance through the Napoleonic Empire, including the Reformation, Counter Reformation, Thirty-Years War, Puritan Revolution, rise of absolute monarchy, the Enlightenment, and the French Revolution. Special emphasis on religion and social change, church-state relations, ideals of religious reform, and critiques of religion itself.

### HIST-1335 Modern Europe

Chief economic, political and social developments in European society since 1815, including the Industrial Revolution, Marxism, the Russian Revolution, political and economic imperialism, World Wars I and II, the Great Depression and the rise of totalitarian states.

### HIST-2430 Medieval Kingship: Power, Patronage, and Propaganda, 750 - 1035



This writing-intensive seminar-style course will introduce historical methods and skills through the study of three medieval kings: Charlemagne, Emperor of the Franks; Otto I, Emperor of Germany; and Cnut the Great, King of England, Norway, and Denmark. We will examine primary sources, conduct secondary research, and develop our own historical hypothesis about the significance of these kings and their reigns. Writing assignments will include source analyses, secondary critiques, and a final research project.

### HIST-2432 European Frontiers 1848 - Present

Analyzes the shifting borders of Modern Europe, ones often accompanied by deadly consequences in the eastern two-thirds of the continent. In particular, this course will examine how physical and societal borders have been redrawn to create categories of inclusion and exclusion in Modern Europe. (Also listed as GRST 2432.) (Offered every other year).

### HIST-3431 The Anglo-Saxons: Scholars, Saints, and Warriors

This course explores the history and culture of the Anglo-Saxons, who ruled England from 500 through 1066. Themes may include Anglo-Saxon warrior culture, foreign invasion and conquest, the development of kingship and government, and the spread of Christianity. The discussion-driven course will focus on the analysis of primary texts, works of art, and archaeological evidence.

### HIST-3432 Vikings, Saxons, and Franks: the Barbarian North, 500-1300

This discussion-driven course examines concepts of barbarism and civilization among three medieval populations: the Vikings, Saxons, and Franks. Students may analyze medieval histories and chronicles, pagan myths and saints' lives, epic poetry and sagas, and modern historical scholarship. Classroom discussions and student research will focus on how these three societies constructed their own identities by recording and narrating their past.

### HIST-3433 The Middle Ages in Film

This discussion-driven course examines how medieval history has been portrayed on the big screen. Our classroom discussions will focus on the historical foundations of three films and consider how the events they depict were understood by people living in the Middle Ages. Readings assignments will consist of medieval primary sources and secondary scholarship by modern authors; additional requirements include three research projects and an in-class research presentation. (Offered occasionally).

## Lower Division - Latin American History

### HIST-1140 Preceptorial in Latin American Cultural Traditions

This one hour course provides enrichment for interested students in HIST 1340, "Latin American Cultural

Traditions." The preceptorial meets once a week for 50 minutes in order to discuss primary sources, such as written documents, maps, images, or literature. Special attention will be given to writing. Students must be enrolled concurrently in HIST 1340.

## HIST-1340 Latin American Cultural Tradition

Beginning with the first Americans and ending with contemporary Latin America, this course provides a synthetic overview of the emergence of distinctive cultural traditions in Latin America. The "old" worlds of Pre-Columbian American, Iberia, and Africa are studied as are the historical processes that created "new" world cultural traditions in Latin America. Interested students may register concurrently for HIST 1140 (Preceptorial in Latin American Cultural Traditions).

## Lower Division - Middle East History

### HIST-1350 Medieval Islamic History, 570 - 1517

Historical developments in the Middle East from the life of the Prophet Muhammad to the establishment of the Ottoman Empire: the initial expansion of Islam, the Umayyad and Abbasid empires, Islamic Spain, the Crusades, Fatimid and Mamluk Egypt, and the Turco-Mongolian migrations and conquests.

### HIST-1351 The Modern Middle East

Historical developments in the Middle East from the Ottoman conquest of Cairo in 1517 to the present: the Ottoman empire during the age of Sulayman the Magnificent, European imperialism in the Middle East and Ottoman reform efforts, the rise of Arab nationalism and of Zionism, World War I and the creation of the modern Arab state system, the development of oil, the Cold War in the Middle East, the Arab-Israeli conflict, and the Persian-Arabian Gulf arena.

## Lower Division - United States History

### HIST-1360 The History of the United States Through Reconstruction

An integrative survey of major political, economic and social developments in the history of the United States of America from colonial settlement through the post-Civil War era of Reconstruction.

### HIST-1361 The History of the United States Since Reconstruction

An integrative survey of the political, economic and diplomatic history of the United States of America from Reconstruction to the present, emphasizing those factors most influential in shaping contemporary society.

## HIST-1370 The African American Experience Through Reconstruction

This course focuses on the social, cultural, and political history of African Americans from approximately 1619 to 1877. Topics may include the genesis and evolution of Black slavery and freedom, the Revolutionary War, Nat Turner's Rebellion, and the Civil War and Reconstruction. Particular emphasis is placed on changing ideals of freedom and how African Americans struggled both to achieve and then redefine ever-evolving conceptions of freedom, whether understood politically, socially, or economically.

## HIST-1371 The African American Experience Since Reconstruction

This course focuses on the social, cultural, and political history of African Americans from approximately 1877 to the present. Topics may include the genesis and evolution of Jim Crow, Black urban migration, the Harlem Renaissance, the Civil Rights Movement, and the Black Power Movements. Particular emphasis is placed on changing ideals of freedom and how African Americans struggled both to achieve and then redefine ever-evolving conceptions of freedom, whether understood politically, socially, or economically.

## HIST-1375 Value Conflicts in American History Through Reconstruction

Use of critical methodologies to assess the conflicting value systems in pre-industrial America and the way social, political and economic issues associated with those conflicts resulted in the formation of a U.S. national identity.

## HIST-1376 Value Conflicts in Contemporary American History Since Reconstruction

Use of critical methodologies to assess the conflicting value systems prominent in post-industrial America and the way social, political and economic issues illustrate value conflict.

## HIST-1380 History of Modern Science

This course surveys major developments in the history of science from 1500 to the present, emphasizing the broad social and cultural implications of scientific change. Topics may include: early modern astronomy and anatomy; science and empire in the Enlightenment; the impact of Darwinism on science and religion; scientific racism; nuclear physics and World War II; and the rise of information technologies.

# Upper Division - African History

## HIST-3300 Gender Matters in African History

Focuses on the history of women in Africa from 1800 to the present. Topics may include the family, marriage, childhood, education, sports, and recreation, work and the workplace, politics and political life, labor movements, and women's movements. Prerequisite: HIST 1300 or consent of instructor.

## HIST-3304 Religion in African History

Focuses on the role of religious identity in African history. Topics may include the histories of specific religious movements, the ways in which gender and leadership have intersected in new religious movements, the spread of Islam, Sufi orders, European missionary activities, African responses to non-African Christian missionizing, African missionary activities, and the interactions of different religious traditions and communities. Focus is on the period since 1800. Prerequisite: HIST 1300 or consent of instructor.

## Upper Division - Ancient Greece and Rome

### HIST-3310 Archaic and Classical Greece

A study of Greek history from the age of colonization to the death of Alexander the Great (c. 750-323 B.C.), with emphasis on the social and political institutions of Athens and Sparta, relations between Persia and the Greeks, the period of the Peloponnesian War, and the rise of Macedon.

### HIST-3314 The Mediterranean World in the Hellenistic Age

A study of the Hellenistic world, including Rome and Carthage, Ptolemaic Egypt, and other Hellenistic kingdoms, with emphasis on the range of Hellenistic culture and the growing power of Rome, from the death of Alexander to the battle of Actium (323-31 B.C.).

### HIST-3318 Ancient Rome: Late Republic and Early Empire

A study of the political, social, and cultural history of ancient Rome, with particular emphasis on the late Republic and early Empire (ca. 150 B.C.E. to 150 C.E.). (Offered every other year.)

### HIST-3319 The World of Late Antiquity

A study of the political, cultural, and religious life of the Roman Empire from the second to the fifth centuries CE—a vital transitional period between the classical and medieval worlds. Beginning with the "golden age" of the Antonine emperors, this course examines the military and political "crisis" of the third century, the Christianization of the empire in the fourth, and the religious and cultural conflicts that accompanied the fragmentation of power in the fifth. (Also listed as CLAS 3319.) Prerequisite: Sophomore standing or Consent of Instructor

## Upper Division - Asian History

### HIST-3320 The Rise of Modern China

Studies of modern Chinese history since 1800, with emphasis on the processes of modernization, the major phases of the Chinese revolution from the experience with Western imperialism through the Republican period and the emergence of the People's Republic of China. Class methods emphasize reading primary sources in translation and research and writing. Course taught in English. (Also listed as CHIN 3320) Prerequisite: HIST 1320 or consent of instructor.

### HIST-3324 History of Korea

A survey of Korean history from the archaeological record through source materials on the development of the Korean state, the Confucian culture of the Chosen kingdom, and the multiple ordeals of modernization in the twentieth century.

### HIST-3326 Race and Ethnicity in East Asia

This class applies an historical lens to the categories of race and ethnicity as they developed in China, Japan, and Korea from 1800 to the present, drawing as well upon the experience of Southeast Asia for comparison. At its core, this class will approach race and ethnicity not as a priori concepts, but as historically contingent categories that emerge, evolve, and, most importantly, have the capacity to transform reality. We will investigate ethnicity and race from multiple perspectives—from the local and regional, to the national and global—as well as how they intersected with other subjectivities, such as gender, class, and national identities. (Offered every other year).

## Upper Division - European History

### HIST-3333 History of Paris

This course progresses chronologically from Gallo-Roman Paris to present, and explores the continuation and changes in these 2000 years of Parisian history. Students will be introduced to social movements, revolutions, wars, painting, sculpture, architecture, graphic art, music and literature as well as the geography and history of the city. Students will read representative texts from every period. (Offered every other year.)

### HIST-3334 Modern Germany

History of Modern Germany, including the Second Empire, Weimar Republic, National Socialism, two post-World War II German states, and the unified Federal Republic. (Also listed as GRST 3334)

### HIST-3335 The Enlightenment

This course examines the Enlightenment as both an intellectual and cultural watershed moment in the eighteenth century life in the West. Students will explore the social and political thought of the period, looking at a variety of topics such as natural law theory, religious toleration, and the critique of absolute monarchy. Time will also be

devoted to examining the emerging cultural institutions in which such ideas took form and circulated from the second half of the seventeenth century to the French Revolution. Prerequisite: HIST 1334 or consent of instructor.

### HIST-3336 French Empire in the Americas, 1500-1800

Examination of French exploration and settlement in the Americas from the fifteenth century to the reign of Napoleon. Topics may include political, economic, and cultural explanations for exploration, interaction with indigenes and slaves, daily life in the colonial era, and the growing tensions between France and other imperial powers. Prerequisites: HIST 1334, 1360, 1370, or 1375 or consent of instructor.

### HIST-3337 The French Revolution

History of France from the middle of the eighteenth century to the coup of Napoleon in 1799. The course will focus on the political, fiscal, and intellectual origins of the French Revolution (1789-1799), the unfolding of the Revolution in Paris and in the provinces from the calling of the Estates-General to the Reign of Terror, international war between France and Europe, and the Revolution's long-term consequences for French and European history. (Offered every other year.)

### HIST-3338 History of the Holocaust

This course explores the origins, implementation, and legacy of the Nazi murder of six million Jews in Europe during World War II. Special attention will be paid to the motivations and actions of the perpetrators, the perspectives of the victims, and historiographical debates concerning the genocide. (Also listed as GRST 3338)

### HIST-3339 The World War II Era

Rise of the dictators and the road to war, 1919-1939; World War II in Europe, Africa and Asia; major Cold War events from 1945 to the death of Stalin.

## Upper Division - Latin American History

### HIST-3340 Latin American Perspectives

An examination of Latin American history through a study of 19th and 20th century texts from different social and ethnic groups; special attention to interpretations by Native Americans and African Americans. Prerequisite: HIST 1340 or consent of instructor.

### HIST-3344 Modern Brazil

The history of Brazil from 1500 to present. Topics include: slavery and race relations; family life; Indians and the

Amazon; the changing Catholic Church.

## HIST-3346 Modern Mexico

Mexico since independence with emphasis on Juarez and the Reform, the Diaz regime, the Revolution, relations with the United States, and major developments since 1920.

## HIST-3348 Latin American Economic History

A selective survey of the principal currents of economic growth and change in Latin America since the sixteenth century. Special attention given to the uneven formation of market economies, and to problems associated with colonialism and neo-colonialism; with international financial crises and adjustment; and with ideologically diverse models of development. Prerequisite: ECON 1311 and 1312

## Upper Division - Middle East History

### HIST-3352 Modern History of Syria

After a brief survey of Syrian history going back to the Assyrians, Romans, Umayyads, Fatimids, Crusades, and Mamluks, this course will focus on a political, cultural and social examination of the modern history of Syria from the Ottoman period through the present, including Syria's vital role in the disposition of the Middle East during and after World War One, the French Mandate, the post-World War Two rise of Arab nationalism intertwined with the Arab and superpower cold wars, the Arab-Israeli conflict, and post-cold war peace efforts and political transitions in Syria itself under the Asad family.

### HIST-3354 The Modern History of the Persian Gulf Region Since 1500

Examination of the history of the Persian-Arabian Gulf region from the rise of the Safavid Empire to the present; focus on political developments in Iran, Iraq, Saudi Arabia, and the Gulf Sheikdoms. Prerequisite: HIST 1350, 1351 or consent of instructor.

## Upper Division - United States History

### HIST-3360 Economic and Business History of the United States to 1865

A study of the development of American business and the economy through the U.S. Civil War. (Also listed as ECON 3344 and BUSN 3344.) Prerequisites: ECON 1311 and 3 hours of U.S. history or consent of instructor.

### HIST-3361 Economic and Business History of the United States Since 1865

A study of the development of the American economy from the U.S. Civil War to the present. (Also listed as ECON 3345 and BUSN 3345.) Prerequisites: ECON 1311 and 3 hours of U.S. history or consent of instructor.

### HIST-3362 History of Early British America

The history of early British America from the sixteenth through the eighteenth centuries, concentrating on the establishment and development of indigenous if disparate polities, societies and economies. Prerequisites: At least one lower-division course in U.S. history through Reconstruction, or consent of instructor.

### HIST-3363 Early American Social History

Discussion-oriented course focusing on the everyday life of ordinary people from the initial cultural contacts among Europeans, Native Americans, and Africans brought to the New World down through the Revolutionary period. Emphasis on the development and maturation of diverse mainland and island communities in British North America, as well as regional and temporal variations in gender, race, and class relations. Prerequisite: At least one lower-division course in US History through Reconstruction or Consent of Instructor.

### HIST-3465 The American Revolution

Historical interpretations of the period 1763-1793 with focus on the Stamp Act crisis, the final break and war with Great Britain, and state and national constitution-making. Prerequisite: At least one lower-division history course in US History through Reconstruction or Consent of Instructor.

### HIST-3366 U.S. Intellectual History Since the Civil War

This discussion-based course focuses on significant changes in American thought from 1865 to the 1990s. Topics may include changing ideas about religion, science, modernity, democracy, social reform, race, and gender. The course will stress critical analysis of primary texts. Prerequisites: At least one lower-division course in U.S. history since the Civil War, or consent of instructor

### HIST-3367 Science, Technology, and War

This course explores the relationship between science, technology, and war with primary focus on the 19th and 20th century United States and Europe. Topics may include industrialized war and total war, military medicine, psychological warfare, the rise of the military-industrial complex, and the ethical and international implications of weapons of mass destruction. This course requires no previous background in science or technology.

### HIST-3469 U.S. Foreign Relations

A survey of key events, policies, personalities, and ideas that shaped American foreign relations between the late nineteenth century and the present. (Offered every year)



## HIST-3370 Free Blacks in America

This course traces the lives of free blacks in America from the early seventeenth century to the Civil War. The course examines free blacks in relation to the origins of American slavery, the Revolutionary War, black radicalism, community development, antebellum slavery, and the American Civil War. Attention will be given to issues of class, gender, and identity. Prerequisite: At least one lower-division US History course, or Consent of Instructor.

## HIST-3372 Black Images in Film

Examines the depictions of blacks in America cinema from 1915 to present. This course introduces students to the history of blacks in film and examines how film has been used as a tool of social and political commentary. Attention will be given to issues of race, color, class, and gender. Prerequisite: At least one lower division U.S. history course or consent of instructor.

## HIST-3374 The Old South

Historical developments in the South from the late sixteenth century through the Civil War. This course will examine the South in relation to such major topics as the Revolutionary War, slavery, and the rise and fall of the Confederacy. Attention will be given to issues of race, class, gender, identity, and political ideology. Prerequisite: At least one lower-division US History course, or Consent of Instructor.

## HIST-3375 The Civil War and Reconstruction

This course focuses on the Civil War and Reconstruction as dramatic and defining episodes in American history. Student will examine the emerging sectional conflicts that led up to the war, the military and social history of the war itself, and Reconstruction, with particular attention given to the construction of "freedom" following the upheaval. The class will focus on race, class, gender, and the shaping of individual and collective identities. Prerequisite: At least one lower-division US History course, or Consent of Instructor.

## HIST-3376 History of Texas

Spanish and Mexican periods; revolution and the Republic; social, political, and economic changes since statehood.

# Historiography, Thematic, and Comparative History

## HIST-3468 Public History, Memory, and Interpretation

This course will provide students with practical experience in public history, material and visual culture, and oral history methods. It will familiarize students with the work historians do to interpret the past and share their

interpretations with the public in museums, historic homes, archives, government agencies, private corporations, and the media. Requirements include regular in-class presentations, an exhibition critique, and a proposal for a historical exhibition on a topic of the student's choosing. (Offered every other year).

### HIST-3381 Historians and their Craft

A colloquium on selected current debates, schools, and conflicting approaches among historians. Critical discussion of emerging fields as well as attention to ongoing debates within more traditional historical scholarship. Especially appropriate for anyone considering history as a major.

### HIST-3382 The City in History

Cross-cultural examination of urban life in the pre-industrial, industrial, and contemporary cities of Asia, Europe, and the Americas with special emphasis on the U.S. urban experience. Interdisciplinary perspective drawing upon history, political science, sociology, and urban planning for an understanding of the complexity of urbanization. (Also listed as URBS 3305.)

### HIST-3384 Slavery and the Atlantic Economy

Interdisciplinary analysis of the Atlantic market joining Europe, Africa and the Americas from the sixteenth through nineteenth centuries, with particular emphasis upon slavery, the slave trade, and the development of the "plantation complex." Makes explicit use of economic theory to explain historical change. (Also Listed as ECON 3343) Prerequisites: ECON 1311 and HIST 1334 or HIST 1340, or consent of instructor.

## Special Topics and Honors

### HIST-1392 Topics in History

From time to time, the department will offer lower division courses not described in the Courses of Study Bulletin. May be repeated on different topics

### HIST-3-90 Independent Study

Independent study in selected areas. 1 to 6 semester hours. Prerequisites: 6 advanced hours in history and consent of instructor.

### HIST-3388 Methods of Instruction History

Examination of various ways to teach history at the elementary, secondary, or college levels with special emphasis on the inquiry process. Students will work with both original and secondary sources and develop an extensive

teaching unit as a final project. Topics may include Texas, U.S., or world history.

### HIST-3-92 Special Topics in History

From time to time the department will offer special topic courses not described in the Courses of Study Bulletin. Announcement of such courses will be by special prospectus. May be repeated on different topics.

### HIST-4498 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors students in their first semester of their senior year.

### HIST-4499 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors students in their second semester of their senior year.

### HIST-3-94 Public History Internship

The Public History internship is a structured and supervised professional work experience with an accepted historical or cultural institution, non-profit organization, or history-related sector within a private business enterprise. To be recognized, the experience must be preapproved and must include specific learning objectives, weekly and final reflections from the intern, and evaluations from the employer. An internship is typically done by a student who has attained sufficient preparation in the academic field of history. The experience may be paid or unpaid. Variations in credit according to hours performed, from 0 to 6 hours. Must be taken on a Pass/Fail basis. (Offered every semester).

## Seminars

### HIST-4400 Seminar in African History

Seminars require advanced work both in the classroom and in the library. Classes are devoted to common readings and are designed to help the student master the major secondary works and the research methods appropriate to the topic; work in the library is to be devoted to the development of individual topics, research, and writing. The outcome of a seminar is a major research paper that represents the student's contribution to the broader historical debates within the particular field. Students may take a second seminar with the same course number if the topic offered under that number is different. Prerequisite: Senior standing or consent of instructor.

### HIST-4420 Seminar in Asian History

Seminars require advanced work both in the classroom and in the library. Classes are devoted to common readings and are designed to help the student master the major secondary works and the research methods appropriate to the topic; work in the library is to be devoted to the development of individual topics, research, and writing. The outcome of a seminar is a major research paper that represents the student's contribution to the broader historical debates within the particular field. Students may take a second seminar with the same course number if the topic offered under that number is different. Prerequisite: Senior standing or consent of instructor.

### HIST-4430 Seminar in European History

Seminars require advanced work both in the classroom and in the library. Classes are devoted to common readings and are designed to help the student master the major secondary works and the research methods appropriate to the topic; work in the library is to be devoted to the development of individual topics, research, and writing. The outcome of a seminar is a major research paper that represents the student's contribution to the broader historical debates within the particular field. Students may take a second seminar with the same course number if the topic offered under that number is different. Prerequisite: Senior standing or consent of instructor.

### HIST-4440 Seminar in Latin American History

Seminars require advanced work both in the classroom and in the library. Classes are devoted to common readings and are designed to help the student master the major secondary works and the research methods appropriate to the topic; work in the library is to be devoted to the development of individual topics, research, and writing. The outcome of a seminar is a major research paper that represents the student's contribution to the broader historical debates within the particular field. Students may take a second seminar with the same course number if the topic offered under that number is different. Prerequisite: Senior standing or consent of instructor.

### HIST-4450 Seminar in Middle East History

Seminars require advanced work both in the classroom and in the library. Classes are devoted to common readings and are designed to help the student master the major secondary works and the research methods appropriate to the topic; work in the library is to be devoted to the development of individual topics, research, and writing. The outcome of a seminar is a major research paper that represents the student's contribution to the broader historical debates within the particular field. Students may take a second seminar with the same course number if the topic offered under that number is different. Prerequisite: Senior standing or consent of instructor.

### HIST-4460 Seminar in United States History A

Seminars require advanced work both in the classroom and in the library. Classes are devoted to common readings and are designed to help the student master the major secondary works and the research methods appropriate to the topic; work in the library is to be devoted to the development of individual topics, research, and writing. The outcome of a seminar is a major research paper that represents the student's contribution to the broader historical debates within the particular field. Students may take a second seminar with the same course number if the topic offered under that number is different. Prerequisite: Senior standing or consent of instructor.

## HIST-4470 Seminar in United States History B

Seminars require advanced work both in the classroom and in the library. Classes are devoted to common readings and are designed to help the student master the major secondary works and the research methods appropriate to the topic; work in the library is to be devoted to the development of individual topics, research, and writing. The outcome of a seminar is a major research paper that represents the student's contribution to the broader historical debates within the particular field. Students may take a second seminar with the same course number if the topic offered under that number is different. Prerequisite: Senior standing or consent of instructor.

# Interdisciplinary Second Major

## Faculty

[Duane Coltharp, Ph.D.](#) , Associate Professor, English; Associate Vice President for Academic Affairs

[Natasa Macura, Ph.D.](#) , Associate Professor, Mathematics

[Mario Gonzalez-Fuentes, Ph.D.](#) , Assistant Professor, Business Administration

[David Rando, Ph.D.](#) , Professor, English

[Brian Bondari, D.M.A.](#) , Associate Professor, Music

[Harry Wallace, Ph.D.](#) , Associate Professor, Psychology

## Overview

The Interdisciplinary Second Major (ISM) allows students to pursue a unique learning path that integrates material from several disciplines. Working with a variety of faculty members, each student designs a comprehensive curriculum for rigorous study of a specific topic or intense training in a closely defined area.

The ISM is designed for students who have already declared a primary major in an existing program. Students may not use the ISM to achieve a second, and different, bachelor's degree.

## Requirements

## Requirements

- I. Each proposed major must have an advisory committee of three faculty members representing two or more different disciplines, one of whom will be chair.
- II. The advisory committee will help the student prepare a proposal for the major, select courses, and develop a course that synthesizes the diverse work of the major (normally, an existing three-hour independent study course directed by a member of the faculty advisory committee).
- III. In order to submit a proposal for an Interdisciplinary Second Major, a student must have already declared a first major.
- IV. The proposal should identify at least nine (9) hours of courses that will serve as a core for the major and an array of supporting courses from which the remaining credits will be chosen. In addition, the proposal should identify one synthesis course (at least 3 hours), normally taken during the student's senior year after the core courses have been completed.
- V. The minimum number of hours for an interdisciplinary major is thirty-six (36). Of that number, at least eighteen

- (18) must be upper-division. No more than eighteen (18) hours may be taken from a single discipline. No more than nine (9) hours may be selected from courses that are used towards any other major.
- VI. The selection of courses must ensure depth in the area of study as well as breadth of exposure to varied perspectives.

## Procedures

- I. A student who wishes to pursue an Interdisciplinary Second major must submit a proposal before the end of the second semester of the junior year. The proposal form may be obtained from the Office of the Registrar.
- II. The Interdisciplinary Second Major Committee will consider this proposal and, if approved, will recommend it to the University Curriculum Council for final approval.
- III. The advisory committee will monitor the student's progress toward the major, provide guidance, and evaluate any changes to the course of study.
- IV. During the semester in which the student completes the coursework for the major, he or she will make a public presentation to his or her advisory committee in order to demonstrate a mastery of the interdisciplinary topic. This presentation must be organized in conjunction with the student's synthesis course.

# International Studies

## Faculty

[Dania Abreu-Torres, Ph.D.](#) , Associate Professor, Modern Languages and Literatures

[Rosa Aloisi, Ph.D.](#) , Assistant Professor, Coordinator, International Affairs

[Rosana Blanco-Cano, Ph.D.](#) , Associate Professor, Modern Languages and Literatures; Coordinator, Mexico, The Americas, and Spain (MAS) Program

[Anene Ejikeme, Ph.D.](#) , Associate Professor, History; Coordinator, African Studies

[Nanette C. Le Coat, Ph.D.](#) , Associate Professor, Modern Languages and Literatures; Coordinator, European Studies; Director of International Studies

[Alfred Montoya, Ph.D.](#) , Associate Professor, Sociology and Anthropology; Coordinator, Global Health Studies

[Tahir H. Naqvi, Ph.d.](#) , Associate Professor, Sociology and Anthropology

[David Ribble, Ph.D.](#) , Professor, Biology; Coordinator, International Environmental Studies

[Eugenio Dante Suarez, Ph.D.](#) , Associate Professor, Finance and Decision Sciences

[Hyon Joo Yoo, Ph.D.](#) , Associate Professor, Political Science

## Overview

International Studies is an interdisciplinary undergraduate degree program that combines broad approaches to world affairs, foreign language learning, experience abroad, and specialized studies in one of the regional or functional concentrations.

## Requirements

- [The Major](#)
- [The Minor](#)
- [The Concentrations](#)
- [The Senior Experience](#)
- [Languages Across the Curriculum Program](#)
- [Concentration Course Requirements](#)
  - [African Studies](#)
  - [East Asian Studies](#)
  - [European Studies](#)
  - [Global Health Studies](#)
  - [Mexico, The Americas, and Spain Program](#)
  - [Middle East Studies](#)



- [International Affairs](#)
- [International Environmental Studies](#)
- [Courses in the Languages Across the Curriculum Program](#)

## The Major

The requirements for a Bachelor of Arts with a major in International Studies are as follows:

### I. Program Requirements

- A. No fewer than 33 credit hours.
- B. Advanced Language study (at least 6 upper division hours). This requirement in the Middle East and East Asian Studies concentrations may be modified in special circumstances upon recommendation of the adviser and the consent of the International Programs director.
- C. One of the following courses: HIST 3469 (U.S. Foreign Relations), PLSI 1342 (International Politics), or ANTH/SOCI 3349 (Globalization and Social Change)..
- D. Required enrollment during each semester of residence in the major in INTL 3100 (International Studies Colloquium). Course may be repeated for 6 hours, only 3 of which may be applied to the major.
- E. Completion of INTL 4104 (Senior Portfolio).
- F. Concentrations (15-18 hours including courses taken while abroad).

International Studies concentrations are individual programs of study that are designed by students in consultation with the appropriate concentrations adviser. A student may propose courses from the concentration list (below), or with the approval of the adviser and program director, from among courses taken abroad or unlisted courses taken while at Trinity.

While not required, students may select the Internship Course option (INTL 4-01; maximum 3 hours).

While not required, INTL 4-00 (Senior Research Project) may be taken by students wishing to pursue an international studies project independently or in conjunction with an upper division course.

Students are strongly encouraged to take courses in the Languages across the Curriculum Program.

Study Abroad recommended, with the advice of the major adviser and study abroad adviser.

**II. University requirements:** Completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

# The Minor

The requirements for a minor in International Studies are as follows:

- I. Completion of no fewer than 21 credit hours.
  - II. The lower division sequence in an appropriate foreign language (the equivalent of four college semesters). This requirement in the Middle East and East Asian Studies concentrations maybe modified in special circumstances upon recommendation of the adviser and the consent of the International Programs director.
  - III. One of the following courses: HIST 3469 (U.S. Foreign Relations), PLSI 1342 (International Politics), or ANTH/SOCI 3349 (Globalization and Social Change)..
  - IV. Required enrollment during each semester of residence in the minor in INTL 3100 (International Studies Colloquium). Course may be repeated for 6 hours, only 3 of which maybe applied to the minor.
  - V. Concentrations (12-15 hours including courses taken while abroad). International Studies concentrations are individual programs of study that are designed by students in consultation with the appropriate concentrations adviser. A student may propose courses from the concentration list (below), or with the approval of the adviser and program director, from among courses taken abroad or unlisted courses taken while at Trinity.
  - VI. At least 9 hours must be upper division.
  - VII. Internship Course option (INTL 4-01; maximum 3 hours).
  - VIII. Study Abroad recommended, with the advice of the minor adviser and study abroad adviser.
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# The Concentrations

International Studies concentrations are individual programs of study that are designed by students in consultation with the appropriate concentration adviser. A student may substitute courses taken abroad or special offerings that are not shown on the lists upon recommendation of the adviser and approval by the program director.

*Concentrations and Faculty* (\*concentration coordinator and head adviser)

*African Studies:* Professor Anene Ejikeme\*

*East Asian Studies:* Professor Randall Nadeau\*

*European Studies:* Professor Nanette Le Coat\*

*Mexico, the Americas, and Spain Program:* Professor Rosana Blanco-Cano\*

*Middle East Studies:* Professors David Lesch, Sussan Siavoshi

*International Affairs:* Professor Rosa Aloisi\*

*International Environmental Studies:* Professors Richard Reed, David Ribble\*

*Global Health Studies:* Professor Alfred Montoya\*

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## The Senior Experience

The Senior Experience offers various ways for students to reflect on and unify their interdisciplinary coursework in International Studies.

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## Languages Across the Curriculum Program

Qualified Trinity students are eligible to enroll in the Languages across the Curriculum (LAC) Program, which gives them practice in using professional and academic Spanish, Portuguese, Chinese, Russian, German, or French in special courses in the humanities, social, and natural sciences. Some of these courses are coordinated with existing upper-division courses that are taught in English, and students may enroll in both. Other LAC courses are taught separately as “stand-alone” courses. All LAC courses make extensive use of the target foreign language and most use it as the medium of instruction. Offerings vary from semester to semester and are listed in the pre-registration course schedule under International Studies.

Students may earn a Spanish across the Curriculum certification by successfully completing advanced work in Spanish and a series of courses listed in the Spanish across the Curriculum Program. This certification will be indicated on the student’s official transcript. The requirements are:

- I. SPAN 3301 (Advanced Grammar) or the equivalent
  - II. 3 credit hours of upper-division Spanish electives
  - III. 4 Spanish across the Curriculum courses or 7 credit hours in Spanish across the Curriculum courses
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# Concentration Course Requirements

**Concentrations (\*coordinator and head adviser)**

## African Studies (Professor Anene Ejikeme\*)

African Studies focuses on the study of the historical experience of the peoples of Africa as well as the social, political, economic, and religious institutions and practices of Modern African states. The concentration invites exceptional students to combine courses at Trinity with study abroad to address in an integrative fashion the evolution of the African experience.

**Requirements:** Eighteen hours, including at least one semester of study abroad in Africa. Students will satisfy the International Studies language requirement as noted below. Students may substitute courses abroad or other special course offerings for comparable courses in the Concentration list.

**Language (6-9 hours):** Will be satisfied by either of the following options:

6 hours in an African language, which may include Arabic OR

6 upper-division hours in French or Portuguese and at least 3 hours in the study of an African language, which may include Arabic

**Concentration Courses (9-12 hours):** Selected from the following lists:

### Required Course List (3 hours)

HIST 3300	Gender Matters in African History
HIST 3304	Religion in African History

### History and Religion List (3 hours)

HIST 1300	The African Experience
HIST 1350	Medieval Islamic History, 570-1517
HIST 3384	Slavery and the Atlantic Economy
RELI 3443	Islamic Worlds

### Anthropology and Political Science List (3 hours)

ANTH 3358	The Anthropology of International Relations
PLSI 1332	Film, Literature, and Politics of the Third World

Special Topics courses from departments may be included as concentration courses when topics pertain to Africa.

**Study Abroad (6-9 hours):** To be taken while studying abroad, selected in consultation with the concentration coordinator. Note: These hours do not include the hours devoted to the study of African languages including Arabic.

## East Asian Studies (Professor Randall Nadeau\*)

Among the courses taken, the student must take at least one course in each of the following areas: History, Political Science, and Religion and Philosophy.

### History

CHIN 3320	The Rise of Modern China (also listed as HIST 3320)
HIST 1320	History of China
HIST 1324	Modern East Asia
HIST 3320	The Rise of Modern China (also listed as CHIN 3320)
HIST 3324	History of Korea

### Political Science

CHIN 3343	Chinese Foreign Policy (also listed as PLSI 3343)
PLSI 3331	Comparative Political Economy of North America, Europe, and East Asia
PLSI 3341	East Asian Security
PLSI 3343	Chinese Foreign Policy (also listed as CHIN 3343)

### Religion and Philosophy

CHIN 3428	The Philosophies of China (also listed as PHIL 3428)
CHIN 3433	Chinese Religions: Unity and Diversity (also listed as RELI 3433)

PHIL 3428	The Philosophies of China (also listed as CHIN 3428)
RELI 1330	Asian Religions
RELI 3432	Buddhist Ecology
RELI 3433	Chinese Religions: Unity and Diversity (also listed as CHIN 3433)
RELI 3434	Japanese Literature of the Spirit World

## Other

ARTH 1310	Introduction to Asian Art: China
ARTH 1311	Introduction to Asian Art: Japan
CHIN 2311	Chinese Civilization
CHIN 3305	The Culture of Taiwan
CHIN 3312	Chinese Cinema: A Historical and Cultural Perspective
CHIN 3313	Cities of Strangers: Trans-cultural Chinese Cinema
CHIN 3320	The Rise of Modern China (also listed as HIST 3320)
CHIN 3428	The Philosophies of China (also listed as PHIL 3428)
CHIN 3376	Contemporary Chinese Art (also listed as ARTH 3376)
CHIN 4321	Readings in Modern Chinese Literature
CHIN 4322	Readings in Contemporary Chinese Cinema
CHIN 4351	Classical Chinese
CHIN 4-91	Selected Topics
EAST 2315	East Asian Heroes
LAC 3114	Zhongguo Gudai Sixiang (Classical Chinese Thought)

## European Studies (Professor Nanette Le Coat\*)

Among the courses taken, the student must take at least one course in each of the following departments: History, Religion, and Political Science.

### Art History

ARTH 1408	Art History II: Renaissance to Modern Art
ARTH 3360	Twentieth Century Art: Cubism to Conceptualism (c.1900-1970)

### Economics

ECON 3343	Slavery and the Atlantic Economy (also listed as HIST 3384)
ECON 3351	Development of Economic Thought

### English

ENGL 2301	British Literature: Old English to 1800
ENGL 2302	British Literature: 1800 to the Present
ENGL 3320	Modern Drama (also listed as THTR 3336)
ENGL 3367	British Literature: 1900-Present

### History

HIST 1334	Early Modern Europe (1500-1815)
HIST 1335	Modern Europe
HIST 3332	Culture and Society in Early Modern Europe
HIST 3334	History of Russia
HIST 3335	The Enlightenment
HIST 3336	French Empire in the Americas
HIST 3337	History of France from the Old Regime to the Present
HIST 3382	The City in History
HIST 3384	Slavery and the Atlantic Economy (also listed as ECON 3343)

### Human Communication and Theatre

THTR 3336	Modern Drama (also listed ENGL 3320)
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## Languages across the Curriculum Courses

INTL 3301	Paris: La biographie d'une ville (Paris: The Biography of a City)
INTL 3123	Deutsche Politik (German Politics)

## Modern Languages and Literatures

FREN 3303	French Civilization
FREN 3305	Introduction to French Literature I
FREN 3306	Introduction to French Literature II
GERM 3305	Introduction to German Literature I
ML&L 3321	German Cinema
ML&L 3340	Russian Literature in Translation I
ML&L 3341	Russian Literature in Translation II
RUSS 3303	Russian Culture
RUSS 3305	Introduction to Russian Literature I
RUSS 3306	Introduction to Russian Literature II
SPAN 3311	Spanish Civilization
SPAN 3331	Introduction to Spanish Literature
SPAN 4334	Nineteenth-Century Spanish Literature
SPAN 4336	Twentieth-Century Spanish Literature

## Music

MUSC 3341	Music History I: Ancient Greece to Baroque
MUSC 3342	Music History II: Classical Era to the Present

## Philosophy



PHIL 3422	Classical Modern Philosophy
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PHIL 3423	German Idealism
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### Political Science

PLSI 3330	European Politics
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PLSI 3331	Comparative Political Economy of North America, Europe, and East Asia
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PLSI 3362	Modern Political Thought
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PLSI 3363	Masters of Suspicion: Contemporary Political Thought
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### Religion

RELI 3441	Creating Judaism
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RELI 3442	The Christian Tradition
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RELI 3443	Islamic Worlds
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### Sociology and Anthropology

ANTH 3358	The Anthropology of International Relations
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## Global Health Studies (Professor Alfred Montoya\*)

Global Health Studies is a concentration within the International Studies minor. The basic requirements for the International Studies minor are listed above ("The Minor.") To complete the Global Health Studies concentration within this minor, Students must take four courses distributed as follows: INTL 3301 Global Health and at least one course in each of the following topical areas: behavioral, science, and statistics.

### Behavioral Area

ANTH 3345	International Issues in Health and the Environment (also listed as SOCI 3345)
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ANTH 3355	HIV/AIDS: Nature, Power, Populations (also listed as SOCI 3355)
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SOCI 2332	Sociology of Health and Illness
SOCI 3345	International Issues in Health and the Environment (also listed as ANTH 3345)
SOCI 3355	HIV/AIDS: Nature, Power, Populations (also listed as ANTH 3355)

**Science Area**

BIOL 2306	Infectious Diseases
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**Statistics Area**

ANTH 3460	Research Methods: Applied Social Statistics (also listed as SOCI 3460)
MATH 1320	Statistical Methods
PSYC 2401	Statistics and Methods I
SOCI 3460	Research Methods: Applied Social Statistics (also listed as ANTH 3460)

**Mexico, The Americas, and Spain Program (Professor Rosana Blanco-Cano\*)**

**Requirements:** Eighteen hours, which may be taken abroad, spread across the following areas:

**Overview (at least 6 hours)**

GNED 3325	The U.S. Latino Experience
HIST 1340	Latin American Cultural Traditions
SPAN 3311	Spanish Civilization
SPAN 3312	Latin American Civilization

**Cultural Expression (at least 3 hours)**

ANTH 3357	Pre-Columbian Art of Mesoamerica (also listed as ARTH 3335)
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ARTH 3355	Pre-Columbian Art of Mesoamerica (also listed as ANTH 3357)
ARTH 1412	Art and Architecture of Latin America since the 16th Century
ARTH 3345	Spanish Colonial Art and Architecture in Mexico
ARTH 3354	Mexico City
ARTH 3461	Public Art across the Border
COMM 3120	La Telenovela en America Latina (also listed as INTL 3107)
ENGL 4323	Studies in American Literature: Literature and Culture in the Latina/o Borderlands
GNEC 3326	U.S. Latino Cultural and Artistic Expression
INTL 3103	La Cultura Popular Española
INTL 3107	La Telenovela en America Latina (also listed as COMM 3120)
INTL 3119	Identidades juveniles en Latinoamérica: Música contemporánea y expresiones artísticas urbanas (Youth Identities in Latin America: Contemporary Music and Urban Artistic Expression)
INTL 3308	Una breve historia de América Latina en el siglo XX a través de su música popular (A Concise 20th-Century History of Latin America through its Popular Music)
SPAN 3312	Spanish Cinema
SPAN 3322	Spanish American Cinema
SPAN 3331	Introduction to Spanish Literature since 1700
SPAN 4332	Spanish Golden Age Drama
SPAN 3332	Introduction to Spanish American Literature

### History and Society (at least 6 hours)

ANTH 3349	Globalization and Social Change (also listed as SOCI 3349)
ANTH 3356	Seminar on the Ancient Maya
ANTH 3364	Economic Anthropology
BUSI 3340	Haciendo Negocios en Latinoamérica (also listed as INTL 3340)
ECON 3341	Economic Development of Mexico
ECON 3342	Latin American Economic History

ECON 3343	Slavery and the Atlantic Economy (also listed as HIST 3384)
HIST 3344	Modern Brazil
HIST 3346	Modern Mexico
HIST 3384	Slavery and the Atlantic Economy (also listed as ECON 3343)
INTL 3101	La Economía Mexicana
INTL 3133	La República Dominicana
INTL 3340	Haciendo Negocios en Latinoamérica (also listed as BUSI 3340)
INTL 3346	The Spanish Economy in the European Union
INTL 3372	Internship in Spain
PLSI 3333	Latin American Politics
SOCI 3349	Globalization and Social Change (also listed as ANTH 3349)
SPAN 4350	History of the Spanish Language

### **Race, Ethnicity, and Gender Track (at least 3 hours)**

ANTH 3327	Race in America (also listed as SOCI 3327)
ANTH 3343	Relaciones Fronterizas México-Estados Unidos (also listed as INTL 3343 and SOCI 3343)
ANTH 3367	South American Indigenous Peoples: Conquest and Development
HIST 3340	Latin American Perspectives
INTL 3104	La experiencia latina en los Estados Unidos
INTL 3105	La opinion pública del inmigrante: Trabajo de campo sobre migración mexicana
INTL 3106	Los Cubanos-Americanos
INTL 3118	Historia, Resistencia y Rebelión en la Música Chicana
INTL 3134	Culture, Identity, and Language in Contemporary Brazil
INTL 3343	Relaciones Fronterizas México-Estados Unidos (also listed as ANTH 3343 and SOCI 3343)
RELI 3480	U.S. Latino Religious Practices and Traditions
SOCI 3327	Race in America (also listed as ANTH 3327)

SOCI 3343	Relaciones Fronterizas México-Estados Unidos (also listed as NATH 3343 and INTL 3343)
SPAN 4338	Spanish Women Writers
SPAN 4348	Spanish American Women Writers
SPAN 4349	Sexualities in Literature and Film
SPAN 4351	Transnational Mexican Popular Culture
SPAN 4391	Gender and Violence in Spain

## Middle East Studies (Professors David Lesch and Sussan Siavoshi)

For the major concentration in Middle East Studies, students must take 15-18 hours. After fulfilling the specific course requirements of the concentration (below), students may take additional courses from the concentration list or substitute courses taken while abroad or other special course offerings subject to the approval of the concentration coordinator and the International Programs director.

Majors in this concentration must take:

- I. HIST 1350—Medieval Islamic History, 570-1517 or HIST 1351—The Modern Middle East
- II. PLSI 3334—State, Society and Change in the Middle East or PLSI 3344—The Middle East and the World

For the minor concentration in Middle East Studies, students must take 12-15 hours. After fulfilling the specific course requirements of the concentration (below), students may take additional courses from the concentration list or substitute courses taken while abroad or other special course offerings subject to the approval of the Concentration coordinator and the International Programs director.

Minors in this concentration must take:

HIST 1350	Medieval Islamic History, 570-1517 or HIST 1351—The Modern Middle East
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Trinity courses for the Middle East Studies concentration (major or minor) include:

### History

HIST 1350	Medieval Islamic History, 570-1517
HIST 1351	The Modern Middle East
HIST 3350	The Arab Cultural Tradition

HIST 3354      The Persian-Arabian Gulf Region Since 1500

### Political Science

PLSI 3334      State, Society, and Change in the Middle East

PLSI 3344      The Middle East and the World

### Religion

RELI 2356      The Qur'an

RELI 3441      Creating Judaism

RELI 3443      Islamic Worlds

### Sociology and Anthropology

SOCI 3391      Special Topics in Sociology: Modern South Asia: History, Culture, and Society

ANTH 3391      Anthropology Special Topics: Modern South Asia: History, Culture, and Society

## International Affairs (Professor Rosa Aloisi\*)

**Requirements:** a minimum of 15 hours in the following areas:

### One course in ECONOMICS

ECON 3318      The Global Economy

ECON 3340      Economic Growth and Development

ECON 3347      International Trade

ECON 3348      International Monetary Systems

ECON 3361      International Finance (also listed as FNCE 3361)

FNCE 3361      International Finance (also listed as ECON 3361)

### Two courses in POLITICAL SCIENCE

PLSI 1331	Global Politics
PLSI 3331	Comparative Political Economy of North America, Europe, and East Asia
PLSI 3342	International Law
PLSI 3345	U.S. Foreign Policy
PLSI 3346	War and Alliance

### Two courses from the following:

ANTH 2357	Humans and the Environment
ANTH 3345	Understanding Refugees
ANTH 3445	International Issues in Health and the Environment
ANTH 3453	Global Cities
ANTH 3464	Morality in the Marketplace
COMM 3322	International Communication (also listed as HCOM 3374)
ECON 3320	Economics and the Environment
HIST 3339	The World War II Era
HCOM 3374	International Communication (also listed as COMM 3322)

Students may substitute courses taken while abroad or special course offerings for comparable courses in the areas listed below, subject to the approval of the concentration coordinator and the International Programs director.

## International Environmental Studies (Professors Richard Reed and David Ribble\*)

Students must take 15-18 hours from the following list, or from among courses taken while abroad, or from among special course offerings subject to the approval of the concentration coordinator and the International Programs director. The student must take at least one course in each of the following topical areas: economics, natural resource science and management, and humans and their environment.

## Economics Area

### Economics

ECON 3330	Economics and the Environment (also listed as URBS 3330)
URBS 3330	Economics and the Environment (also listed as ECON 3330)

## Natural Resource Science and Management Area

### Biology

BIOL 1311	Integrative Biology I
BIOL 3434	Ecology
BIOL 4351	Conservation Biology

### Geosciences

GEOS 1405	Oceanography
GEOS 3408	GIS and Remote Sensing
GEOS 3411	Hydrology

## Humans and their Environment Area

### Comparative Literature

CMLT 230	World Literature and the Environment
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### General Education

GNED 1306	Energy and Society
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### Geosciences



GEOS 1304	Environmental Geology
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### Physics and Astronomy

PHYS 1302	Frontiers of Physics
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PHYS 1303	The Earth's Changing Environment
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### Sociology and Anthropology

ANTH 1301	Introduction to Anthropology
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ANTH 2357	Humans and the Environment
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ANTH 3349	Globalization and Social Change (also listed as SOCI 3349)
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ANTH 3358	The Anthropology of International Relations
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ANTH 3464	Morality in the Marketplace
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ANTH 3367	South American Indigenous Peoples: Conquest and Development
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SOCI 3349	Globalization and Social Change (also listed as ANTH 3349)
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### Urban Studies

URBS 3347	Urban Systems
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## Courses in the Languages Across the Curriculum Program

Qualified Trinity students are eligible to enroll in the Languages across the Curriculum (LAC) Program, which gives them practice in using professional and academic Spanish, Portuguese, Chinese, Russian, German, or French in special courses in the humanities, social, and natural sciences. Some of these courses are coordinated with existing upper-division courses that are taught in English, and students may enroll in both. Other LAC courses are taught separately as “stand-alone” courses. All LAC courses make extensive use of the target foreign language and most use it as the medium of instruction. Offerings vary from semester to semester and are listed in the preregistration course schedule under International Studies.

Students may earn a Spanish across the Curriculum certification by successfully completing advanced work in Spanish and a series of courses listed in the Spanish across the Curriculum program. This certification will be indicated on the student's official transcript. The requirements are:

- SPAN 3301 (Advanced Grammar) or the equivalent
- 3 credit hours of upper-division Spanish electives
- 4 Spanish across the Curriculum courses or 7 credit hours in Spanish across the Curriculum courses

## Courses

### INTL-1100 International Student Orientation

A one-credit course to assist new international students in successfully adjusting to Trinity University. It will provide: 1)an overview of the U.S. higher education system, including basic student and faculty roles; 2)a review of key academic differences with other educational systems from around the world; 2)an introduction to cultural adjustment and culture shock; and 4)a review of laws and legal structures that affect immigration status. Assignments may include readings, interviews of students, staff members, and faculty, and brief reports and reflexive essays. The course is required of all incoming, first-year international students who are not U.S. citizens or permanent residents. Must be taken Pass/Fail.

### INTL-2102 Preparing for Study Abroad

A one-credit course for students preparing to study abroad (or away) for academic credit. Includes academic planning including written proposals for student abroad; program selection and logistical planning for the time away; pre-departure orientation; studies of cross-cultural communication and adjustment; guided individual country studies and studies of US relations with the proposed host country. The course should be taken the semester immediately preceding the planned study abroad (or away) experience. Must be taken Pass/Fail.

### INTL-2103 Alternative Spring Break

Faculty led course that will introduce students to contemporary issues as well as cultural and historical background materials to prepare students for service learning projects in specific national and international destinations. Cross-cultural competencies and sensitivities will be developed prior to field experiences. The course is offered on a Pass/Fail basis only. Repeatable for credit.

### INTL-3100 International Studies Colloquium

The Colloquium consists of a weekly meeting of all majors and minors in the program. Under the direction of an

assigned faculty member the session topics include discussions of world affairs; presentations by student faculty members and other guests; reports from affiliated student groups; presentations on careers and graduate school opportunities; and reports from seniors about their seminars and tutorial projects. Offered each semester. Required of all International Studies majors and minors while in residence in the program up to a maximum of six hours credit, only three of which may be counted toward the major. Must be taken Pass/Fail.

### INTL-3103 Returning From Study Abroad

A one-credit course for students returning from study abroad that is designed to help students maximize the benefit of their study abroad experiences and to help them readjust to the U.S. and university culture. Students will reflect upon and integrate their experiences in relation to their academic interests and various facets of university life. Must be taken Pass/Fail.

### INTL-3301 Global Health

This three-hour course considers critical concepts associated with global health including the importance of culture to health, determinants of health, and how the organization of health systems affects health. The relationship of demographics to epidemiology will be discussed as they define the global burden of disease. Specific topics introduced in the course include the environment and health, children and maternal health, both communicable and noncommunicable diseases, and unintentional injuries. A semester-long project will consider how policy and programs can be brought together to address a global health issue.

### INTL-4-01 International Studies Internship

Between zero and three hours of credit may be arranged for appropriate international internships that are undertaken while abroad if they meet academic criteria set by the Committee. Credit may also be arranged for internships in San Antonio during the school year and away, during the summer, with the approval of the International Programs Director. Must be taken Pass/Fail.

### INTL-4-02 Special Topics in International Studies

From time to time the International Studies program will present special topic courses not described in the Courses of Study Bulletin. Announcements of such courses will be by special prospectus. May be repeated on different topics.

### INTL-4103 Model United Nations

Students chosen for the Trinity delegation to national Model United Nations competitions are required to register for this one-hour course. The course involves participation in parliamentary training sessions, learning about the country being represented by the Trinity delegation, and research and writing on the topics before the various Model United Nations committees. May be repeated for credit in successive years. Must be taken Pass/Fail.

## INTL-3001 Studying Abroad

A course for students arranging to study abroad (or away) for academic credit. Includes academic planning including written proposals for study abroad; program selection and logistical planning for the time away; pre-departure orientation; studies in cross-cultural communication and adjustment; and guided individual country studies and studies of US relations with the proposed host country. This course will be offered in the Fall of each year for students studying abroad in the Spring and in the Spring for students to study abroad in the Fall.

## INTL-3315 Iceland - Its Unique Geological, Economic and Cultural History

This course will expose students to the unique economic, geologic, and cultural history of Iceland. The economic aspects will focus on the role of financial markets and monetary institutions in economic booms and crashes using Iceland as a case study, possible solutions to public good problems such as the Icelandic fishing quota, business practices which often prioritize protection of the environment and social responsibility, and the role of international trade in development of a small country. The geological history will emphasize Iceland's plate tectonic setting, volcanism, glacial history and related hazards, geothermal energy, and the effects of climate change. The cultural portion will explore the fundamental role of literature in a country with virtually no illiteracy, and the role of the sagas in the transmission of culture, language, and the law in the country with the oldest parliament in the world. (Offered every other year).

## INTL-4-00 Senior Research Project

A course for seniors who wish to pursue an international studies project – either independently or in conjunction with an existing, upper-division course – with the permission of and under the supervision of a faculty member.

## INTL-4104 Senior Portfolio

A required course for majors in the senior year to prepare a selective, self-reflexive portfolio that draws on achievements in the major and explains them in terms of personal development and professional and scholarly goals and objectives.

## Courses in the Languages Across the Curriculum Program

### LAC-2101 Biblical Hebrew

The primary goal of this course is to introduce students to ancient Hebrew so they will be able to read parts of the Hebrew Bible in the original language. This course begins with an introduction to the Hebrew alphabet and vowel system and therefore requires no prior knowledge of Hebrew. (Same as RELI 2101)

### LAC-3101 Mujeres Cineastas de España Y Las Américas

An exploration of themes of gender, sexuality, and identity as approached by the most distinguished women filmmakers in Spain and the Americas. The films covered in this course do not duplicate any materials covered in SPAN 3321 or SPAN 3331. Prerequisite: SPAN 2302 or equivalent

### LAC-3102 En Blanco Y Negro: Raza Y Cine En America Latina

An examination and analysis of Latin American films in terms of the performance and representation of race. The course introduces discourses of whiteness and mestizaje in terms of the hierarchies and social expectations that they advanced through film. Course is taught entirely in Spanish. Prerequisites: SPAN 2302 or equivalent

### LAC-3103 Cultura Popular Espanola (spanish Popular Culture)

Spanish Popular Culture focuses on recent cultural production that includes film, television, periodicals, and recently published literature. This course is taught in Spanish and students will gain practice in reading, writing, speaking, and listening comprehension. Prerequisite: SPAN 2302, the equivalent, or Consent of Instructor

### LAC-3104 La Experiencia Latina En Los Estados Unidos (The U.S. Latino Experience)

An examination of the historical experience and cultural expression of the Latino population of the United States, with attention to the role of U.S. foreign policy in creating Latino communities, the impact of domestic policy on the various subgroups, the evolution of U.S. Latino cultural expression, and the changing relationship of Latinos to U.S. society and its institutions. This course will be taught entirely in Spanish and is designed to accompany GNEB 3325. Prerequisites SPAN 2302, the equivalent, or the consent of the instructor; and students must have completed, or be enrolled in, GNEB 3325.

### LAC-3105 La Opinion Publica Del in Migrante: Trabajo de Campo Sobre Migracion Mexicana (public Opinion of Immigrants: Fieldwork on Mexican Migration)

This course combines the study of issues surrounding the immigration debate in the United States with training in the design of field experiments and the methods of survey research. Students participate in empirical research by conducting surveys in Spanish. This course will be conducted entirely in Spanish. Prerequisite: SPAN 2302, the equivalent, or consent of the Instructor.

### LAC-3106 Los Cubano-Americanos

This course explores significant cultural, artistic, cinematic, musical, sociopolitical, and literary representations from 1960 to the present. A principal objective is to analyze and deconstruct stereotypes about Cuban-Americans. This course is taught in Spanish. Prerequisite: SPAN 2302, the equivalent, or consent of instructor.

### LAC-3107 La Telenovela En America Latina (The Latin American Soap Opera)

An examination of the Latin American telenovela, soap opera, from the perspectives of development communication, popular culture, and international television. This course will be conducted entirely in Spanish. (Cross-listed as COMM 3120) Prerequisite: SPAN 2302, the equivalent, or consent of instructor.

### LAC-3108 Tradiciones Culturales En América Latina

This is a companion course to HIST 1340, Latin American Cultural Traditions. It offers students the opportunity to augment the themes of the course through the perspectives of Spanish language authors who write about personal and/or national histories. Readings will be in Spanish, but discussions will be in both English and Spanish depending on the proficiency of class members. Prerequisite: SPAN 2302 or equivalent Corequisite: Concurrent or previous enrollment in HIST 1340

### LAC-3109 Madrid: Una Historia Cultural

This course explores significant cultural, cinematic, musical, sociopolitical, urban, theoretical, and literary representations of the city of Madrid. The interdisciplinary approach draws on film, music, and television as well as literary, critical, and theoretical texts. Prerequisites: SPAN 2302 or equivalent

### LAC-3110 La musica popular latinoamericana (Latin American Popular Music)

A study of Latin American culture through popular music, this course will explore both musical forms and lyrics. Musical forms include bolero, tango, balada, cumbia, salsa, rumba, merengue. The multilayered messages in the lyrics will be analyzed for social and political insights into Latin American culture. This course will be conducted entirely in Spanish. Prerequisite: SPAN 2302, the equivalent, or consent of instructor.

### LAC-3111 Narody Rossii (The Peoples of Russia)

A companion course to ML&L 3342, which introduces Russian culture from medieval through modern times, including not only the Russians, but also the peoples of southern and eastern Russia. The course will emphasize religion, folklore, and art through a series of short Russian-language readings and weekly discussions. The course will be conducted entirely in Russian. Prerequisite: RUSS 2302 or the equivalent. INTL 3111 is designed to be taken concurrently with ML&L 3342, (The Peoples of Russia), although it may be taken separately with consent of the instructor.

### LAC-3112 Shangye Zhongwen (The Practice of Business in China)

A study of cultural concepts and customs that have influenced contemporary Chinese business practices and behaviors, through the use of readings and weekly discussions. The course will be conducted entirely in Chinese. Prerequisite: CHIN 2302 or the equivalent.

### LAC-3113 Reality TV in China

This course explores Chinese language, society, and culture through the lens of reality television audition tapes submitted to "Chinese Idol." Video clips are unscripted and spontaneous conversations that represent individuals from a variety of social, economic, and cultural backgrounds. (Offered every other year). Prerequisites: CHIN 2302 or equivalent

### LAC-3114 Zhongguo Gudai Sixiang (Classical Chinese Thought)

A study of traditional Chinese thought as manifested in the language of selected classical texts of history, philosophy, poetry, and religion. All readings will be conducted in classical Chinese. No prior knowledge of Chinese is required. Co-requisite: Simultaneous enrollment in a Chinese civilization, literature, history, philosophy, political science, or religion course, or consent of instructor.

### LAC-3115 Chinese Popular Songs

An examination of Chinese popular songs and music videos as cultural texts to develop listening, conversation, oral presentation, writing, reading, and online research skills. Genres explored may include Mandopop, Tawain Hip-Hop, and Chinese Rock 'n Roll. (Offered every other year.) Prerequisite: CHIN 2302 or equivalent.

### LAC-3118 Historia, resistencia, y rebelion en la musica chicana (History, Resistance, and Rebellion in Chicana/o Music)

A study of important historical events and issues of resistance against racism, classism, and the economic exploitation of Chicanas and Chicanos through samples of the music produced by them throughout the 20th century. The course will analyze both musical forms and lyrics. The musical genres will include corridos (ballads), Pachuca and Pachuco (zootsuiter) music, Rock 'n' Roll, Civil Rights movement music, Chicana/o Punk, Mariachi, Tejano, and Conjunto music among other styles. This course will be conducted entirely in Spanish. Prerequisite: SPAN 2302 or equivalent.

### LAC-3119 Identidades juveniles en Latinoamerica: musica contemporanea y expresiones artisticas urbanas (Youth Identities in Latin America: Contemporary Music and Urban Artistic Expression)

This course will examine how contemporary music from different Latin American singers (or groups) and popular arts play a significant role in the process through which youth cultures configure their worlds. The class will be exclusively in Spanish. Prerequisite: SPAN 2302 or the equivalent.

### LAC-3120 La Inquisición y hoy: 4 judíos de Monterrey

An exploration of various aspects of the "judeomexicana" (Mexican Jewish) experience in two key periods: the most repressive (the Inquisition) and the most florescent (the contemporary republic). This exploration will proceed primarily by exploring four key players, all of whom are connected to the city of Monterrey. (Offered every other

semester.) Prerequisite: SPAN 2302 or equivalent

### LAC-3123 Deutsche Politik (German Politics)

This course offers an overview of German politics. It seeks to familiarize students with important theories about actors, and institutions in, and developments of German politics. After completing the course students should feel confident and comfortable conversing about German politics with German-speaking instructors. Prerequisite: GERM 2302, or the equivalent, or consent of the instructor.

### LAC-3124 L'histoire française: un parcours cinématographique (French History through Film)

Moving chronologically through the centuries, this course will explore key historical moments in French culture through film. This course will be conducted entirely in French. Prerequisite: French 2302 or the equivalent

### LAC-3125 Russian Basics: Language and Culture for Non-Specialists

INTL 3125 offers an introduction to Russian language and culture for non-specialists. Topics include the Cyrillic alphabet, basics of Russian grammar and pronunciation, and Russian bibliographic, computing and conversation skills. INTL 3125 is open to all students and has no prerequisites.

### LAC-3133 La República Dominicana: Una Introducción (An Introduction to the Dominican Republic)

As an introduction to the Dominican Republic, this course includes information on the history, politics, economy, society, literature, arts, and culture of the island nation. The course draws on academic and literary texts in Spanish, as well as on slides, audiovisual recordings, food, and other resources to explore the various themes. This course will be entirely conducted in Spanish. Prerequisite: SPAN 2302, the equivalent, or consent of instructor

### LAC-3134 Culture, Identity, and Language in Contemporary Brazil

In this course we will critically examine iconic representations of Brazilian identity, including choro, samba, Afro-Raggae, and Cinema Novo, all of which have served as significant forms of self-expression within the broader framework of Brazilian culture. Through this examination, students will develop a deeper appreciation of Brazilian culture that goes beyond the stereotypical images of Brazil as the tropical land of Carnival and the country of soccer. Although the medium of instruction of this class is Spanish, students will develop reading skills in Brazilian Portuguese using their knowledge of Spanish.

### LAC-3301 Paris: the Biography of a City (Paris: La Biographie D'une Ville)

This course covers the political, social, economic, and cultural history of Paris from the Middle Ages to the present. The course draws on a variety of sources in French, including film and television. Prerequisite: FREN 3305, 3306 or



the equivalent, or consent of instructor.

### LAC-3308 Una breve historia de America Latina en el siglo XX a traves de su musica Popular (A Concise 20TH Century History of Latin America Through its Popular Music)

This 3-hour regular course will survey major events and characters that have shaped Latin American history in the 20th century using musical renditions deeply rooted in the collective memory of Latin Americans. Prerequisite: SPAN 2302

### LAC-3340 Haciendo Negocios En Latinoamerica (Doing Business in Latin America)

This course is both a language and an applied business course. On the language part, it is intended to increase the Spanish proficiency in reading, writing, and speaking. The other aspect of the course includes a thorough understanding of cultural, political, and economic aspects of the Latin American business environment. Moreover, the course will immerse the student in the intricacies of exporting to, importing from, establishing a new business in, or operating a foreign branch in a Latin American country. Prerequisites: ECON 1311, Spanish proficiency, and consent of instructor. (Also listed as BUSN 3340.)

### LAC-3343 Relaciones fronteras Mexico-Estados Unidos (bilingue)

In the seminar we will examine a variety of social, cultural, political, and economic phenomena that characterize the Mexico-United States border region. Include an optional overnight excursion to communities located on the international boundary itself. This course is conducted bilingually in Spanish and English, i.e., in both languages of the Mexico-U.S. border region. Competence in speaking, reading, writing, and listening in both Spanish and English is a requirement for participation in the course. (Also listed as ANTH 3343 and SOCI 3343)(Offered occasionally.) Prerequisites: SPAN 2302 or equivalent Spanish competence

### LAC-3344 Teaching in the Bilingual (English/Spanish)classroom

An introduction to the education of second language learners in the context of bilingual education and English as a second language (ESL) programs. This course includes field experience in working with bilingual and ESL populations in an educational setting. (Also listed as EDUC 3344)

### LAC-3346 La economia espanola y la Union Europea (The Spanish Economy and the European Union)

An examination of Spain's economic development and its position within the European Union. The business, economic, and political transformation of Spain from a struggling nation with an authoritarian regime to an economic power with an open and democratic society are studied. The course also examines the development of European Union, with a special focus on its influence on the Spanish business environment. The experiential component of the course includes visits to businesses, government agencies, and NGO's in Spain. (Also listed as

INTB 3346, ECON 3346 and SPAN 3346) (Offered once a year). Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of the instructor.

### LAC-3372 Practica profesional en Espana (Internship in Spain)

A supervised summer internship in Spain. Students enrolled in INTL 3372 will serve as interns with various firms, trade groups, governmental agencies, or public interest groups where they will work and gain experience related to the Spanish economy and business world. The nature of the student's responsibilities will vary with the internship involved and be subject to the approval of the supervising faculty member. (Also listed as ECON 3372, INTB 3372, and SPAN 3372.) (Offered once a year). Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of instructor.

### LAC-4130 Quanqiu Shangwu Wenhua-Zhong-Mei Jiaodian (Global Business Culture)

A companion course to BUSN/CHIN 3330 which examines the diverse business culture in China in comparison to that in other countries, particularly in the United States. This course must be taken concurrently with BUSN/CHIN 3330 and will be taught entirely in Chinese. Students must have the ability to write and converse in Chinese. (Also listed as CHIN 4130 and BUSN 4130) Prerequisites: Senior Standing, CHIN 3302 or the equivalent, and consent of instructor Corequisite: BUSN/CHIN 3330

### LAC-4-02 Special Topics in Languages Across the Curriculum

From time to time the LAC program will present special topic courses not described in the Courses of Study Bulletin. Announcements of such courses will be by special prospectus. May be repeated on different topics.

# Linguistics

## Faculty

[Jane Childers, Ph.D.](#) , Professor, Psychology; Director

[Rocio Delgado, Ph.D.](#) , Associate Professor, Education

[Andrew Hansen, Ph.D.](#) , Associate Professor, Human Communication and Theatre

[Mark C. Lewis, Ph.D.](#) , Professor, Computer Science

[Michael Ward, Ph.D.](#) , Associate Professor, Modern Languages and Literatures

## Overview

The minor in Linguistics provides students an opportunity to study the principles involved in the most basic and universal of human symbol systems. Classical and modern languages share with the disciplines of anthropology, computer science, mathematics, philosophy, psychology, sociology, and speech pathology an interest in the nature of language: how it is acquired, how it is used, and how it changes across time and space. The minor allows the student to learn the basics of linguistics and to pursue the application of these tenets in a variety of fields.

Completion of this program will be indicated on the student's transcript with the notation "Minor in Linguistics."

## Requirements

Students interested in a Linguistics minor should submit an application to the chair of the Committee, who will assign a faculty adviser to the student.

The requirements for a Linguistics minor are as follows:

Eighteen (18) credit hours including at least nine (9) hours from the Primary Curriculum—three (3) hours from the Core area and three (3) hours each from any two other areas—and the remaining nine (9) hours from the Primary Curriculum and/or the Supporting Curriculum. At least nine (9) hours must be upper division.

## Primary Curriculum

### Core

HCOM 1305	Foundations of Linguistics (also listed as LING 1300)
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HCOM 1310	Applied Linguistics (also listed as LING 1310)
LING 1300	Foundations of Linguistics (also listed as HCOM 1305)
LING 1310	Applied Linguistics (also listed as HCOM 1310)

### Acquisition

PSYC 2330	Fundamentals of Cognition
PSYC 3321	Cognitive Development

### Syntax

FREN 3301	Advanced Grammar
GERM 3301	Advanced German I
LATN 3301	Latin Prose Composition
MATH 3326	Introduction to Abstract Mathematics
RUSS 3301	Advanced Russian I
RUSS 3302	Advanced Russian II
SPAN 3301	Advanced Grammar

### Semantics

PHIL 3433	Philosophy of Language
HCOM 3352	Rhetorical Analysis (also listed as ENGL 3352)

## Supporting Curriculum

### Classical Studies

CLAS 3371	Introduction to Romance Linguistics (also listed as FREN 3371, ITAL 3371, LING 3371, and SPAN 3371)
GREK 3302	Attic Prose
GREK 3304	Greek Historians
LATIN 3303	Latin Prose to 43 B.C.
LATIN 3305	Latin Prose from 43 B.C.

### Communication

COMM 3322 International Communication (also listed as HCOM 3374)

### Computer Science

CSCI 3320 Principles of Theoretical Computer Science

CSCI 3368 Principles of Programming Languages

CSCI 3-94 Seminar: Provability

### English

ENGL 3346 History of the English Language

### French

FREN 3371 Introduction to Romance Linguistics (also listed as CLAS 3371, ITAL 3371, LING 3371, and SPAN 3371)

### Human Communication

HCOM 3372 Intercultural Communication (also listed as ANTH 3332)

HCOM 3374 International Communication (also listed as COMM 3322)

### Italian

ITAL 3371 Introduction to Romance Linguistics (also listed as CLAS 3371, FREN 3371, and SPAN 3371)

### Linguistics

LING 3-90 Directed Studies—Junior Level

LING 4-90 Directed Studies—Senior Level

### Philosophy

PHIL 2340 Symbolic Logic I

PHIL 3431 Philosophy of Mind

PHIL 3340 Symbolic Logic II

PHIL 3433 Philosophy of Language

### Psychology

PSYC 3431	Memory and Cognition
PSYC 3360	Special Topics in Psychology: Language Development

### **Sociology and Anthropology**

ANTH 3331	Language, Culture, and Society (also listed as SOCI 3331)
ANTH 3332	Intercultural Communication (also listed as HCOM 3372)

### **Spanish**

SPAN 3303	Spanish Phonetics and Phonology
SPAN 3371	Introduction to Romance Linguistics (also listed as CLAS 3371, FREN 3371, ITAL 3371, and LING 3371)

Departmental topics courses, readings courses, and seminars on linguistic topics are acceptable as approved by the Linguistics Committee chair.

## **Courses**

### **LING-1300 Foundations of Linguistics**

Examines the foundations of human language including its phonology, morphology, syntax, and semantics. (Also listed as HCOM 1305.)

### **LING-1310 Applied Linguistics**

Examines applications of linguistics in psycholinguistics (language acquisition and language processing), sociolinguistics (language development and change in groups and organizations), the interaction of language and culture, and analytical procedures (discourse and text analysis). (Also listed as HCOM 1310.)

### **LING-3-90 Directed Studies - Junior Level**

Independent work under faculty supervision. The nature of the project will be agreed upon by the student and participating faculty member prior to registration. Credit varies from 1 to 4 semester hours, depending on the scope of the project. Prerequisite: Consent of Instructor

### **LING-4-90 Directed Studies - Senior Level**

Independent work under faculty supervision. The nature of the project will be agreed upon by the student and

participating faculty member prior to registration. Credit varies from 1 to 4 semester hours, depending on the scope of the project. Prerequisite: Consent of Instructor

# Mathematics

## Faculty

[Eduardo Cabral Balreira, Ph.D.](#) , Professor

[Ryan C. Daileda, Ph.D.](#) , Associate Professor

[Saber N. Elaydi, Ph.D.](#) , Murchison Term Professor of Mathematics

[Julio Roberto Hasfura-Buenaga, Ph.D.](#) , Associate Professor; Chair

[Eddy Kwessi, Ph.D.](#) , Associate Professor

[Natasa Macura, Ph.D.](#) , Associate Professor

[Brian K. Miceli, Ph.D.](#) , Professor

[Hoa Nguyen, Ph.D.](#) , Associate Professor

[Peter Olofsson, Ph.D.](#) , Professor

## Requirements

- [The Major](#)
- [Acceptance into Program](#)
- [The Honors Program](#)

## The Major

The requirements for the degree of Bachelor of Arts with a major in mathematics are as follows:

### **I. Departmental requirements:**

- A. Mathematics core: MATH 1311, 1312, 2321, 3323, 3326, 3360, 3362.
- B. Seminar/Writing: MATH 2094, 3194, 3195.
- C. Mathematics electives: Eighteen (18) additional MATH credit hours numbered above 3320. At least three (3) of them must be numbered 4xxx.
- D. Programming proficiency: CSCI 1320.
- E. Completion of the capstone courses: MATH 4394, or MATH 4398 and 4399.

The appropriate choice of courses beyond those in the core depends on the student's interests and career plans and should be determined in consultation with the academic adviser. Further course suggestions and other information appear on the department's Web site.

**II. University Requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.



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## Acceptance into Program

FULL ACCEPTANCE is granted if the following requirements are met at the time of application:

- I. MATH 1311, 1312, 2321, 3323 with grades of C or better.
- II. Grade point average of at least 2.0 in all mathematics courses.
- III. Completion of at least one mathematics course required for the major while enrolled at Trinity University.
- IV. CSCI 1320 with a grade of C or better.

PROVISIONAL ACCEPTANCE may be granted if the Department of Mathematics is convinced that the applicant has promise of graduating with a degree in mathematics. In cases of provisional acceptance, courses and performance standards will be specified so that the applicant may be granted full acceptance.

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## The Minor

A mathematics minor must complete MATH 1307 or 1311, 1308 or 1312, 2321, and nine (9) hours of upper division mathematics.

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## The Honors Program

### Objectives

The Mathematics Department offers an Honors Program to provide students the opportunity to develop their capacity for mathematical skill and knowledge by completing a senior honors thesis. The thesis may be written in collaboration with any other university department that offers instruction. Specifics for interdisciplinary thesis must be worked out on an individual basis with the department. The Honors Program requires a minimum of nine credit hours arranged over two or three semesters. Six of these hours must be taken in the senior year and devoted to work on the thesis. The remaining three hours must be taken in an upper division course completed by the end of the junior year in the area in which the thesis is to be written. The specific upper division course will be chosen with the consent of the adviser.

### Application and Procedures

Application for admission to the Honors Program is made through the department in the fall of the junior year. The University requires a 3.3 overall grade point average and two faculty letters of recommendation for admission to the program. In addition, the mathematics department requires at least 15 hours of work in mathematics courses

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as well as a 3.2 average on all work attempted in the department.

Before an application is submitted, the candidate must obtain the consent of a full time department member to serve as the thesis adviser. The application is then submitted to the thesis adviser who determines if the documentation merits further consideration. Given the judgment by the thesis adviser that the student is a good candidate for the thesis, the student, in collaboration with the adviser, prepares a description of the work proposed along with a bibliography. These documents are forwarded to the department faculty for approval. Given a positive recommendation from the faculty, the student is then an official candidate for departmental honors. At this point the department, in collaboration with the thesis adviser, recommends a thesis committee to the Office of Academic Affairs. The committee will consist of the thesis adviser, another mathematics department faculty member who serves as reader, and a third member who may be from another department or an expert from outside the University.

### **Requirements**

The Honors Program requires a minimum of nine credit hours arranged over two or three semesters. Six of these hours must be taken in the senior year and devoted to work on the thesis. The remaining three hours must be taken in an upper division course completed by the end of the junior year in the area in which the thesis is to be written. The specific upper division course will be chosen with the consent of the adviser.

A final presentation of the completed thesis will be made to the department during the second semester of the student's senior year. After the presentation and a reading of the final thesis, the department will determine its acceptability for departmental honors. The accepted thesis will be sent to the Office of Academic Affairs for binding. The student will pay the cost of the binding. The completed thesis will be bound and placed in the Trinity University library.

For further information, contact the department at (210) 999-8205.

## **Courses**

### **MATH-1190 Putnam Exam Seminar**

This course involves preparation for the Putnam Exam. Topics include problem-solving applications of geometry, calculus, mathematical introduction, counting techniques, and more. The course may be repeated up to four times for credit. Fall. Prerequisite: MATH 1311 or consent of instructor.

### **MATH-1301 Pre-Calculus**

Equations and inequalities; systems of linear equations. Polynomial and rational functions; trigonometric functions and identities; and transcendental functions. MATH 1301 provides a thorough preparation for Calculus 1.

### **MATH-1305 Mathematics for Business and Economics**

The focus of the course will be to master mathematical principles such as derivatives and integrals and how these are related to applications for business and economics. Students will learn about mathematical rigor, basic algebraic properties of sets and functions. The course will also cover topics on optimization, the mathematics of finance, and introduce students to basic ideas of operations research, such as systems of linear equations and linear programming. No student who has completed MATH 1312 may register for this course.

### MATH-1311 Calculus I

A study of functions including transcendental and trigonometric: Limits and continuity; differential and integral calculus; and applications. Prerequisite: Successful completion of either MATH 1301 or the equivalent. Students who have completed the equivalent of MATH 1301, as opposed to taking MATH 1301 at Trinity, must take the Mathematics Placement Exam to determine readiness for this course.

### MATH-1312 Calculus II

A study of methods of integration, series, and an introduction of differential equations. (Offered every semester). Prerequisite: MATH 1311 or the equivalent.

### MATH-1320 Statistical Methods

Methods of analyzing data, statistical concepts and models, estimation, tests of significance, and regression. MATH 1320 and 3320 cannot both be taken for credit. Prerequisite: MATH 1311, or equivalent.

### MATH-1330 Introduction to Modern Mathematics

A survey of modern mathematics. Topics to include infinity and infinities, the fourth dimension, fractional dimensions, fractals and chaos, pitfalls of statistics, and objects with fewer than the expected number of sides.

### MATH-2117 Sports Analytics Seminar

This course introduces basic tools used by data scientists in the field of Sports Analytics. The course covers the principles of research methodology used to gather and clean databases. It also explores basic methods in the mathematical theory of sports analytics such as ranking methods and predictive analysis of outcomes. (Offered every semester). Prerequisites: MATH 1305 or MATH 1311 or Consent of instructor

### MATH-2308 Introduction to Analytical Models

An introduction to the formulation, interpretation, and predictive analyses of models arising in the life, physical, or social sciences. Mathematical topics will include differential equations modeling with continuous and discrete time models, linear algebra models, regression analysis, and introduction to standard models in Big Data such as ranking systems and recommendation systems. The necessary mathematical and scientific background will be developed as needed. (Offered every Spring) Prerequisites: MATH 1305 or MATH 1311

## MATH-2321 Calculus III

The study of partial differentiation, multiple integrals, and vector calculus. Prerequisite: MATH 1312

## MATH-2324 Numerical Calculus

Introduction to the numerical algorithms fundamental to scientific computer work. Elementary error analysis, interpolation, quadrature, linear systems of equations, and introduction to the numerical solution of ordinary differential equations. (Also listed as CSCI 2324.) Spring. Prerequisites: CSCI 1320 and MATH 1311

## MATH-2094 Majors' Seminar

Attendance at the departmental seminar. Grade based on attendance. This course cannot be taken concurrently with MATH 3194, 3195, or 4394.

## MATH-3316 Differential Equations and Linear Algebra

The theory and applications of first order equations, linear second order equations, linear systems of equations, Laplace transforms, the eigenvalue problem, matrix algebra, and vector spaces. MATH 3316 and MATH 3336 may not both be taken for credit. Prerequisite: MATH 1312

## MATH-3320 Probability and Statistics for Engineers And Scientists

An introduction to statistics specifically for engineers and scientists. Topics include probability, random variables and their distributions, univariate and multivariate distributions, sampling distributions, estimation, hypothesis tests, confidence intervals, simple and multiple regression, analysis of variance, and reliability. Prerequisite: MATH 2321.

## MATH-3323 Linear Algebra

A study of the theory and computations of linear algebra. Topics include matrix and vector operations, least squares, linear transformations, eigenvalues and eigenvectors. Prerequisite: MATH 1312 or consent of instructor.

## MATH-3326 Introduction to Abstract Mathematics

This course begins with an elementary survey of logic and set theory. From there, the course introduces the concept of the mathematical proof, framed in introductions to the real line, point set topology, and modern algebra. This course is offered every semester. Prerequisite: Math 1312 or equivalent or consent of instructor.

## MATH-3327 Probabilistic Models in Life Sciences

An introduction to probabilistic modeling with emphasis on its use in biology. Fundamental concepts such as conditional probability and conditional expectation are studied in depth in order to prepare for an introduction to the theory and applications of Markov chains. Applications in biology may include birth-and-death processes, branching processes, sequence alignment, population genetics, epidemic processes, molecular evolution, and phylogenetic tree construction. (This course or MATH 3328 will be offered every other year.) Prerequisite: MATH 1320 or MATH 3320 or MATH 3334.

### MATH-3328 Mathematical Models in Life Sciences

The course is designed to introduce advanced tools to study discrete mathematical models in the life sciences including their practical applications. The focus will be on understanding the processes, implications, and results of modeling phenomena in life sciences in the laboratory setting or field. The course investigates exponential growth and logistic models, competitive and predatory-prey models, age structured models, harvesting models, and epidemiological models. The integrated laboratory experience consists of several experiments on model organisms such as bacteria and protists. In addition, human epidemiological data will also be utilized. (This course or MATH 3327 will be offered every other year) Prerequisite: MATH 1311 and 1312.

### MATH-3334 Probability

This course covers the basic concepts of probability, including counting methods, events, conditional probability, discrete and continuous random variables and their distributions, multivariate distributions, commonly used discrete and continuous distributions, functions of random variables, expectation, variance, and correlation. Fall. Prerequisite: MATH 2321

### MATH-3335 Mathematical Statistics

This course covers the basic concepts of statistics, including samples, statistics, estimation, sampling distribution of estimators, confidence intervals, tests of hypotheses, significance, power, and simple linear regression. Additional topics may include Bayesian statistics, analysis of variance, and nonparametric methods. Spring. Prerequisite: MATH 3334

### MATH-3336 Differential Equations

Introduction to the basic quantitative and qualitative concepts of differential equations. Topics include first order differential equations, second order differential equations and applications, Laplace transforms, and systems of differential equations. MATH 3316 and MATH 3336 may not both be taken for credit. Offered occasionally. Prerequisite: MATH 3323

### MATH-3338 Mathematical Modeling

Formulation, analysis, and interpretation of models arising in the life, physical, or social sciences. The actual source for the models will depend upon the interests of the instructor. Mathematical topics will include one or

more of the following areas: linear algebra, differential equations, difference equations, numerical analysis, statistics, stochastic processes, and optimization. (Offered every Fall.) Prerequisites: MATH 2321; CSCI 1320 or knowledge of computer programming; or consent of instructor.

### MATH-3341 Number Theory I

A study of the arithmetic properties of the ring integers. Topics may include factorization, modular arithmetic, solution of polynomial congruences, the law of quadratic reciprocity, Diophantine equations, and applications to cryptography. Prerequisite: MATH 3326 or consent of instructor.

### MATH-3343 Combinatorics I

A study of the theory and problem-solving techniques of algebraic and enumerative combinatorics. Topics include basic enumeration and the combinatorial proofs, the binomial theorem, recurrence relations, generating functions, and inclusion-exclusion. Fall, alternate years. Prerequisite: MATH 3326 or consent of instructor.

### MATH-3351 Numerical Analysis I

Methods of solution of algebraic and transcendental equations, simultaneous linear algebraic equations, numerical integration and differentiation, initial and boundary value problems of ordinary differential equations. (Also listed as CSCI 3351.) Spring. Prerequisite: CSCI 1321, MATH 3316

### MATH-3352 Numerical Analysis II

Direct and iterative solution of linear systems of equations, approximation theory, eigenvalues and eigenvectors, solution of non-linear systems of equations, boundary value problems for ordinary differential equations, numerical solutions of partial differential equations. Irregular. Prerequisite: MATH 3351.

### MATH-3355 Non-Euclidean Geometry

Topics include the fifth postulate of Euclid, hyperbolic geometry of Lobachevsky, elliptic geometry of Riemann. Spring, alternate years. Prerequisite: MATH 3326 or Consent of Instructor.

### MATH-3357 Partial Differential Equations

The heat, wave and Laplace equations and boundary value problems, the method of separation of variables, special functions, orthogonal expansion, Sturm-Liouville theory, the Fourier and Laplace transform methods. Additional topics may include Green's functions, Poisson's integral formula for the disk and variational calculus if time permits. Prerequisites: MATH 2321 and 3316 or 3336.

### MATH-3359 Difference Equations

Dynamics of first order difference equations, difference equations of higher order, stability analysis, methods of Z-transform. Offered infrequently. Prerequisites: MATH 3316 or 3323

### MATH-3360 Real Analysis I

An introduction to the real number system, elementary topology of Euclidean spaces, calculus of real-valued functions of one and several variables including a rigorous development of limits, continuity, differentiation and integration. Fall. Prerequisite: MATH 3326.

### MATH-3362 Modern Algebra I

A study of the theory of groups, rings, and fields. Fall. Prerequisites: MATH 3326.

### MATH-3370 Financial Mathematics

Problems that arise in the area of finance and the mathematics of their solutions. Examples include portfolio selection, option pricing, arbitrage, single-agent optimization, the Fundamental Theorem of Asset Pricing, and the Black-Scholes formula. Prerequisites: MATH 1320 or 3320 or 3334 and MATH 3316 or 3323

### MATH-3-90 Reading and Conference

Course will vary in credit according to scope of work included. Prerequisite: Consent of instructor.

### MATH-3391 Special Topics

Special topics not covered by courses described in the Course of Study Bulletin. Announcements of this course will be made by special prospectus. The course may be repeated for credit on different topics.

### MATH-3194 Junior Writing Workshop

Students work to improve their mathematical skills as well as their writing and presentation skills. They will be required to submit computer solutions to several math problems. They will attempt to solve a mathematical problem and will present their findings in both written and oral form. Attendance at the Major's Seminar (MATH 2094) is required.

### MATH-3195 Junior Technology Workshop

Students work to improve their mathematical software skills as well as their writing and presentation skills. They will be required to submit computer solutions to several mathematical problems. They will also be required to read a referred mathematics journal article and present their findings in both written and oral form. Attendance at the majors seminar (MATH 2094) is required. Prerequisite: MATH 3194

## MATH-4324 Linear Algebra II

Topics beyond MATH 3323, which may include canonical forms, spectral decompositions, analysis of linear systems, and matrix norms, Fall, alternate years. Prerequisite: MATH 3323 or consent of instructor

## MATH-4336 Stochastic Processes

An Introduction to the theory and applications of stochastic processes. Topics may include processes, random walks, Markov chains in discrete and continuous time, branching processes, queuing systems, and Brownian motion. Spring, alternate years. Prerequisite: Math 3320 or 3334 or consent of instructor.

## MATH-4342 Number Theory II

Topics beyond MATH 3341, which may include the theory of fractional ideals in number fields, arithmetic functions and Dirichlet series, distribution of primes, and the prime number theorem. Spring, alternate years. Prerequisite: MATH 3341 and MATH 3360 or 3362, or consent of instructor.

## MATH-4344 Combinatorics II

Topics beyond MATH 3343, which may include Polya counting, partition theory, special functions, the R-S-K algorithm, combinatorial species, and other advanced topics in algebraic and enumerative combinatorics. Spring, alternate years. Prerequisite: Math 3343 or Consent of Instructor.

## MATH-4361 Real Analysis II

Topics beyond MATH 3360, which may include measure, Lebesgue theory, Banach and Hilbert spaces, manifolds, and differential forms. Prerequisite: MATH 3360.

## MATH-4363 Modern Algebra II

Topics beyond MATH 3362, which may include field and ring theory, representation theory, Galois theory, additional algebraic structures, and applications to other branches of mathematics. Fall, alternate years. Prerequisite: MATH 3362 and 3323.

## MATH-4364 Theory of Complex Variables

A study of functions of a single complex variable including properties of complex numbers, analytic functions, contour integration and Cauchy's theorem, Taylor and Laurent series, the calculus of residues and applications. Additional topics may include conformal mappings, analytic continuation, Rouché's theorem, and infinite products. Fall, alternate years. Prerequisites: MATH 3360 or Consent of Instructor.



## MATH-4365 Topology

Introduction to the study of basic topological concepts including topological spaces, continuous functions, homeomorphisms, separation properties, connectedness, and compactness. Additional topics may be chosen from algebraic or geometric topology. Fall, alternate years. Prerequisite: MATH 3360 or 3362, or consent of instructor.

## MATH-4367 Dynamical Systems

Topics beyond MATH 3336, which may include chaos theory, bifurcation, and discrete continuous systems. Offered occasionally Prerequisites: MATH 3360 and 3336, or consent of instructor.

## MATH-4391 Special Topics

This course will treat special topics not covered by courses described in the Courses of Study Bulletin. Announcements of such courses will be by special prospectus. This course may be repeated for credit on different topics.

## MATH-4194 Majors' Seminar II

Seminar for senior majors. Seniors write reports on lectures and present senior projects. May be repeated for a maximum of two credit hours.

## MATH-4394 Senior Project

Independent project under faculty supervision. Oral and written presentation of results and attendance at the majors' seminar (MATH 2094) are required. Prerequisite: MATH 3195 and senior standing

## MATH-4398 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors students in both semesters of their Senior year. Prerequisite: Senior Standing.

## MATH-4399 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors students in both semesters of their Senior year. Prerequisite: Senior Standing.

## MATH-4-90 Research and Conference

Course will vary in credit according to scope of work included. This course cannot be used to satisfy the 4000-level Mathematics major elective requirement. May be repeated when topics vary. One to three credit hours. (Offered Occasionally). Prerequisite: Consent of the Instructor

# Medieval and Renaissance Studies

## Faculty

[Laura Agoston, Ph.D.](#) , Associate Professor, Art History

[Douglas Brine, Ph.D.](#) , Associate Professor, Art History; Co-Director

[Andrew Kraebel, Ph.D.](#) , Assistant Professor, English

[Nicole Marafioti, Ph.D.](#) , Associate Professor, History; Co-Director

[Willis Salomon, Ph.D.](#) , Associate Professor, English

## Overview

The minor in Medieval and Renaissance Studies is an interdisciplinary program with the following objectives: (a) discovery and re-examination of knowledge about the Middle Ages and the Renaissance and (b) employment of a variety of methods of historical and theoretical analysis as models for such scholarship.

Completion of this program will be indicated on the student's transcript with the notation "Minor in Medieval and Renaissance Studies."

Students interested in a Medieval and Renaissance Studies minor should contact the director of the Medieval and Renaissance Studies Program.

## Requirements

The requirements for a minor in Medieval and Renaissance Studies are as follows:

- I. A minimum of 18 credit hours:
  - a. At least 12 credit hours must be fulfilled by courses in the Primary Curriculum, including at least 3 of the following courses in 3 different disciplines:

ARTH 1314	Art and Architecture of Medieval Europe (M)
ARTH 2430	Art and Patronage at the Court of Burgundy (MR)
ARTH 3344	Northern Renaissance Art in the Sixteenth Century (R)
ARTH 3441	Early Renaissance Art in Italy (R)

ARTH 3442	Age of Leonardo: Art and Architecture in Italy, 1475-1568 (R)
ARTH 3447	Michelangelo: A Media-based Approach (R)
ENGL 3457	Medieval Christian Mysticism (M)
ENGL 4401	Geoffrey Chaucer (M)
ENGL 4420	Studies in Early Modern British Literature (R)
HIST 1332	Medieval Europe (M)
HIST 1333	Medieval Christianity: Tradition and Transformation, 200-1200 (M)
HIST 1350	Medieval Islamic History, 570-1517 (M)
HIST 2430	Medieval Kingship: Power, Patronage, and Propaganda (M)
PHIL 3412	Late Ancient and Medieval Philosophy (M)

b. The remaining credit hours may be fulfilled by courses in either the Primary or Supporting curriculum.

- II. At least 6 hours from the Primary Curriculum must be in Medieval (M or MR) courses and at least 6 hours from the Primary Curriculum must be in Renaissance (R or MR) courses.
- III. At least 9 credit hours of the total to be in upper division courses.
- IV. No more than 8 credit hours to overlap with the student's primary major.
- V. No more than 12 credit hours to be taken in any one department.

Students are encouraged to prepare themselves in modern European languages (normally French, German, Italian, and/or Spanish), as well as in Latin and/or Greek.

### I. Primary Curriculum

M = counts toward the Medieval requirement

R = counts toward the Renaissance requirement

MR = counts toward either the Medieval or the Renaissance requirement

ARTH 1314	Art and Architecture of Medieval Europe (M)
ARTH 2430	Art and Patronage at the Court of Burgundy (MR)
ARTH 3339	Art at the Courts of Europe, c. 1330-1416 (M)
ARTH 3440	Northern Renaissance Art in the Fifteenth Century (MR)
ARTH 3441	Early Renaissance Art in Italy (R)
ARTH 3442	Age of Leonardo: Art and Architecture in Italy, 1475-1568 (R)

ARTH 3344	Northern Renaissance Art in the Sixteenth Century (R)
ARTH 3446	Jan van Eyck and His Legacy (MR)
ARTH 3447	Michelangelo: A Media-based Approach (R)
ARTH 3392	Women's Studies in Art History: Gender and Sexuality in Early Modern Italy (MR)
ENGL 2301	British Literature: Epic to Romantic
ENGL 3346	History of the English Language (MR)
ENGL 3456	The Epic Legacy: Imagining Antiquity in the Middle Ages
ENGL 3456	The Epic Legacy (M)
ENGL 3457	Medieval Christian Mysticism
ENGL 3457/RELI 3457	Medieval Christian Mysticism (M)
ENGL 3358	Medieval and Early Renaissance Drama (MR)
ENGL 3359	Medieval Literature: The World of King Arthur (M)
ENGL 3460	Shakespeare (R)
ENGL 3362	Early Modern British Literature, 1485-1603 (R)
ENGL 3363	Early Modern British Literature, 1603-1660 (R)
ENGL 4401	Geoffrey Chaucer (M)
ENGL 4302	Elizabethan and Jacobean Playwrights (R)
ENGL 4403	Milton (R)
ENGL 4419	Studies in Medieval Literature (M)
ENGL 4420	Studies in Early Modern British Literature (R)
HIST 1332	Medieval Europe (M)
HIST 1333	Medieval Christianity: Tradition and Transformation, 200-1200 (M)
HIST 1350	Medieval Islamic History, 570-1517 (M)
HIST 2430	Medieval Kingship: Power, Patronage, and Propaganda, 750-1035 (M)
HIST 3431	The Anglo-Saxons: Scholars, Saints and Warriors (M)
HIST 3432	Vikings, Saxons, and Franks: The Barbarian North (M)
HIST 3433	The Middle Ages in Film (M)
PHIL 3412	Late Ancient and Medieval Philosophy (M)

PHIL 3422	Early Modern Philosophy (R)
SPAN 4331	Medieval Spanish Literature (M)
SPAN 4332	Spanish Golden Age Literature (R)
SPAN 4333	Don Quixote (R)
SPAN 4391	Special Topics: History of the Spanish Literature (MR)

## II. Supporting Curriculum

ARTH 1407	Art History I: Prehistoric through Medieval Art
ARTH 1408	Art History II: Renaissance to Modern Art
ARTH 3330	Art and Architecture in the Late Classical World
ARTH 3343	Italian Baroque Art
ARTH 3345	Spanish Colonial Art and Architecture in Mexico
CLAS 3404	The Ancient Romance and Novel
FREN 3305	Introduction to French Literature I
FREN 4303	Topics in French Literature of the Seventeenth Century
GERM 3305	Introduction to German Literature I
GREK 2303	Readings in the New Testament
HIST 1334	Early Modern Europe
HIST 3314	The Mediterranean World in the Hellenistic Age
HIST 3318	The Roman Empire
MUSC 3341	Music History I
PLSI 3361	Classical Political Thought
RELI 3441	Creating Judaism
RELI 3442	The Christian Tradition
RELI 3443	Islamic Worlds
RELI 3454	The Letters of Paul
RUSS 3303	Russian Culture
RUSS 3305	Introduction to Russian Literature I
SPAN 3311	Spanish Civilization

SPAN 3331	Introduction to Spanish Literature
SPAN 4301	Spanish Phonetics and Phonology
SPAN 4341	Literature of Colonial Spanish America
THTR 3333	History of Theatre and Drama

## Courses

### MDRS-2-01 Special Topics in Medieval and Renaissance Studies

From time to time, the program will offer special topic courses not described in the Courses of Study Bulletin. Topics may be in any area(s) of Medieval and Renaissance Studies and may be offered at the initiative of faculty members or upon the petition of students. The course will be announced by special prospectus. 1 to 4 credit hours. May be repeated on different topics.

### MDRS-3-01 Special Topics in Medieval and Renaissance Studies

From time to time, the program will offer special topic courses not described in the Courses of Study Bulletin. Topics may be in any area(s) of Medieval and Renaissance Studies and may be offered at the initiative of faculty members or upon the petition of students. The course will be announced by special prospectus. 1 to 4 credit hours. May be repeated on different topics.

### MDRS-3-90 Directed Studies in Medieval and Renaissance Studies

Individual work in areas not covered by other courses. 1 to 4 credit hours. May be taken more than once as content varies. Prerequisite: Consent of Instructor

# Mathematical Finance

## Faculty

[Eduardo Cabral Balreira, Ph.D.](#) , Professor, Mathematics

[Julio Roberto Hasfura-Buenaga, Ph.D.](#) , Associate Professor, Mathematics

[John H. Huston, Ph.D.](#) , Professor, Economics; Director

[Ricardo Manuel Santos, Ph.D.](#) , Associate Professor, Economics

[Eugenio Dante Suarez, Ph.D.](#) , Associate Professor, Finance and Decision Sciences

[Shage Zhang, Ph.D.](#) , Associate Professor, Finance and Decision Sciences

## Overview

The Mathematical Finance major is an interdisciplinary study of financial markets. Increasingly, firms of all types, and financial institutions in particular, rely on sophisticated mathematical models to understand financial markets, to evaluate financial instruments, and to measure and manage risk. To understand and utilize these models, students need specific capabilities that can be only gained from study in the fields of economics, finance, and mathematics. The major is specifically designed for students considering graduate studies and careers in Finance, Applied Financial Economics, Mathematical Finance, Applied Mathematics, or Actuarial Science.

## Requirements

### The Major

The requirements for the degree of Bachelor of Science with a major in Mathematical Finance are as follows:

#### 1. Required Courses

ACCT 1301	Fundamentals of Financial Accounting
FNCE 3301	Fundamentals of Financial Management
ECON 1311	Principles of Microeconomics
ECON 1312	Principles of Macroeconomics
ECON 3325	Intermediate Microeconomics
ECON 4367	Advanced Microeconomic Theory



ECON 4370	Econometrics
MATH 1311	Calculus I
MATH 1312	Calculus II
MATH 2321	Calculus III
MATH 1320 or BAT 2301	Statistical Methods or Statistics for Business and Economics*
MATH 3370	Financial Mathematics
MATH 3316	Differential Equations and Linear Algebra
* MATH 3334	Probability, may be substituted for MATH 1320/BAT 2301. That substitution is essential for those seeking a career in actuarial science.

## 2. Three Additional Elective Courses from the following:

FNCE 3351/ECON 3356	Financial Institutions and Markets
FNCE 3352	Investment Principles and Analysis
FNCE 3363	Student Managed Fund I
FNCE 3361/ ECON 3361	International Finance
FNCE 3362	Financial Management and Policy
FNCE 4362	Derivatives

## 3. Completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

For full admission into the major, students must have credit for Calculus II (MATH 1312), Financial Accounting (ACCT 1301) and Principles of Macroeconomics (ECON 1312) with a grade of at least a C in each. Students who have not yet completed those three classes may still declare the major but are “provisionally accepted.”

## Courses

### MFIN-3-71 Internship

Internships may be arranged with businesses, nonprofit institutions, and government agencies. The job must include analysis based on tools learned in the course of completing the MFIN major. The workload requirements are expected to be similar to those of typical MFIN courses carrying the same number of hours of credit. Must be taken pass/fail. Prerequisites: ACCT 1301, ECON 1312, MATH 1312 and permission of the program chair.

# Modern Languages and Literatures

## Faculty

[Dania Abreu-Torres, Ph.D.](#) , Associate Professor, Spanish

[Danny J. Anderson](#) , Professor, Spanish; President of the University

[Carlos X. Ardavin Trabanco, Ph.D.](#) , Professor, Spanish

[Alan Astro, Ph.D.](#) , Professor, French

[Rosana Blanco-Cano, Ph.D.](#) , Associate Professor, Spanish

**Norma Cantu, Ph.D.** , Norine R. and T. Frank Murchison Professor of the Humanities, Spanish

[Jesus Castro Gorfti, Ph.D.](#) , Visiting Assistant Professor, Spanish

[Nina C. Ekstein, Ph.D.](#) , Professor, French

[Stephen Lee Field, Ph.D.](#) , J. K. and Ingrid Lee Endowed Professor of Chinese Language and Literature

[Jinli He, Ph.D.](#) , Associate Professor, Chinese

[Bruce T. Holl, Ph.D.](#) , Associate Professor, Russian; Chair

**Maria Holl, M.A.** , Lecturer, Russian

[Nanette C. Le Coat, Ph.D.](#) , Associate Professor, French

[Pablo A. Martinez, Ph.D.](#) , Associate Professor, Spanish

**Ana Maria Mutis, Ph.D.** , Lecturer, Spanish

[Debra Ochoa, Ph.D.](#) , Associate Professor, Spanish

[Nicholas Reynolds, Ph.D.](#) , Visiting Assistant Professor, German

[Bladimir Ruiz, Ph.D.](#) , Associate Professor, Spanish

[J'Leen Manning Saeger](#) , Visiting Assistant Professor, Spanish

[Heather Sullivan, Ph.D.](#) , Professor, German

[Curtis Swope, Ph.D.](#) , Associate Professor, German

[Rita E. Urquijo-Ruiz, Ph.D.](#) , Associate Professor, Spanish

[Michael Ward, Ph.D.](#) , Associate Professor, Spanish

[Ginger Wu, Ph.D.](#) , Visiting Assistant Professor, Chinese

[Jie Zhang, Ph.D.](#) , Associate Professor, Chinese

## Overview

The Department of Modern Languages and Literatures offers courses leading to the degree of Bachelor of Arts with a major in Chinese, French, German, Russian, or Spanish. Programs are also available in French, German, and Spanish as teaching fields under the interdepartmental major for teachers in secondary schools. Arabic, Italian, and Japanese are occasionally offered on the elementary and intermediate levels. Courses in Greek and Latin are the responsibility of the Department of Classical Studies.

# Requirements

- [The Major](#)
  - [Chinese](#)
  - [French](#)
  - [German Studies](#)
  - [Russian](#)
  - [Spanish](#)
- [The Minor](#)
- [Transfer Credit](#)
- [The Honors Program](#)
- [Self-Instructional Language Program](#)
- [Modern Languages and Literatures](#)

## The Major

In order to be granted full acceptance for admission to a major in Chinese, French, German, Russian, or Spanish, a student must have completed the 3301 course in that language with a grade of C or better.

## Chinese

The requirements for the degree of Bachelor of Arts with a major in Chinese are as follows:

### I. Departmental requirements:

- A. Completion of 21 credit hours of upper division taught in Chinese, including CHIN 4351.
- B. Completion of one of the following additional requirements:
  1. Nine additional credit hours of upper division courses in Chinese.
  2. The lower division courses, or the equivalent, and at least 3 credit hours of upper division courses in a second foreign language.
- C. Completion of at least one semester or summer abroad in a Chinese-speaking country.

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

# French

The requirements for the degree of Bachelor of Arts with a major in French are as follows:

## I. Departmental requirements:

A. Completion of 21 credit hours of upper division courses, including:

FREN 3301

This course, with a grade of “C” or above, is required for admission to the French major. It must be taken at Trinity University with the following exception:

A student takes an advanced French grammar course elsewhere (including abroad) and then takes the final exam for FREN 3301 at Trinity and passes it with a grade of “C” or above. Students will receive advanced French credit for such courses taken elsewhere, but the course will not be designated as FREN 3301 unless they take the final exam for FREN 3301 and receive at least a “C.”

B. Completion of one of the following additional requirements:

1. Nine additional credit hours of upper division courses in French; OR
2. The lower division courses, or the equivalent, and at least 3 credit hours of upper division courses in a second foreign language.

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

# German Studies

The requirements for the degree of Bachelor of Arts with a major in German Studies are as follows:

## I. Departmental requirements:

- A. Completion of 21 hours of coursework taught in German at the level of GERM 2302 or higher, including GERM 3301 and either GERM 3305 or GERM 3306.
- B. Completion of 9 additional hours of upper-division German (GERM) or of any of the accepted German Studies courses taught in English (GRST).

The accepted German Studies courses are as follows:

GRST 1314	Art and Architecture of Medieval Europe (also listed as ARTH 1314)
GRST 2332	Play Structure and Analysis (also listed as THTR 2332)

GRST 2432	European Frontiers, 1848-Present (also listed as HIST 2432)
GRST 2352	Acting II: Scene Study (also listed as THTR 2352)
GRST 3401	Yiddish Language, Culture, and Film (also listed as ML&L 3401)
GRST 3307	Berlin: From Cabarets to Communists
GRST 3310	German Cinema
GRST 3311	Fairy Tales
GRST 3315	Decadence: German Literature around 1900
GRST 3332	History of Theatre II: From Romanticism to Performance Art (also listed as THTR 3332)
GRST 3334	Modern Germany (also listed as HIST 3334)
GRST 3338	History of the Holocaust (also listed as HIST 3338)
GRST 3341	Music History I: Ancient Greece to Baroque (also listed as MUSC 3341)
GRST 3342	Music History II: Classical Era to the Present (also listed as MUSC 3342)
GRST 3343	Mozart (also listed as MUSC 3350)
GRST 3370	European Politics (also listed as PLSI 3330)
GRST 3371	Political Economy of U.S., Europe, and Japan (also listed as PLSI 3331)
GRST 3372	Masters of Suspicion: Contemporary Political Thought (also listed as PLSI 3363)
GRST 3401	Yiddish Language, Culture, Film (also listed as ML&L 3401)
GRST 3435	Global City Berlin (also listed as PLSI 3435)
GRST 3440	Northern Renaissance Art in the 15th Century (also listed as ARTH 3440)
GRST 3460	German Idealism (also listed as PHIL 3423)
GRST 3461	Nietzsche and German Philosophy (also listed as PHIL 3426)

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

## Russian

### I. Departmental requirements:

A. Completion of 21 credit hours, of which no more than 3 may be lower division (2302).

Upper Division hours will include:

1. RUSS 3301
2. RUSS 3305

The RUSS 3305 requirement will be waived for students who have taken ML&L 3340.

B. Completion of one of the following additional requirements:

1. Nine additional credit hours of upper division courses in Russian.  
Students have the option of substituting up to 9 credit hours from the following courses: ARTH 3362; ECON 3327; HIST 3311; PLSI 3335; OR
2. The lower division courses, or the equivalent, and at least 3 credit hours of upper division courses in a second foreign language.

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

## Spanish

The requirements for the degree of Bachelor of Arts with a major in Spanish are as follows:

**I. Departmental requirements:**

A. Completion of 21 hours, of which no more than 3 may be lower division (2302) and no more than 3 may be taken as Internship. Upper division hours will include:

1. SPAN 3301
2. SPAN 3330 or 3331
3. SPAN 3332

B. Completion of one of the following additional requirements:

1. Nine additional credit hours of upper division courses in Spanish (students have the option of substituting up to three hours of Spanish across the Curriculum courses); OR
2. The lower division courses, or the equivalent, and at least three credit hours of upper division courses in a second foreign language.

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

## The Minor

The requirements for a minor in Chinese, French, German, Russian, and Spanish are as follows: Completion of at least 18 credit hours, of which no more than 6 may be lower division. A minimum of 12 hours toward the minor must be completed at Trinity.

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## Transfer Credit

In conjunction with the Registrar's Office, transfer credit for language courses must be evaluated and approved by the language section in addition to the chair of the department. Such evaluation may include, but need not be limited to, the syllabus for the course and the test required of students showing competency in the language.

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## The Honors Program

I. University requirements

II. Departmental requirements:

The Department of Modern Languages and Literatures offers an Honors Program in Chinese, French, German, Russian, and Spanish. The requirements for Honors in Modern Languages and Literatures are the same as the university requirements. A full description of the program is available in the departmental office.

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## Modern Languages and Literatures

Taught in English and works read are in English.

### ***Plan of Lower Division Language Courses***

***1000-level courses are beginning courses. Emphasis is on the spoken language, with extensive use of dialogues and drills designed to illustrate the basic structural features of the language and to develop oral proficiency.***

Courses numbered 1402 are a continuation of 1401 and will generally complete the study of the basic grammatical

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features of the language.

Courses numbered 2301, 2401, 2302, or 2402 consist of intermediate level language study, focusing on speaking, reading, grammar, writing, and comprehension.

Language courses 1401, 1402, 1403, 1600, 2301, or 2401 may be taken pass/fail unless the student is using them to satisfy the foreign language requirement of the Pathways curriculum.

No credit will be given for any prerequisite course in the four-semester lower-division sequence once a student has received credit for a more advanced course.

## Courses

### Modern Languages and Literature

#### ML&L-1303 Japanese Perspectives

This course introduces the student to Japanese culture in its religious, political, aesthetic, and social dimensions especially as each is affected by Western influences. (Also listed as ANTH 1303 and GNED 1303.)

#### ML&L-3310 French Literature in Translation

A study of major works of French literature in the context of Western literary, political, and cultural history, and literary criticism.

#### ML&L-3311 French Cinema

This course will examine a variety of French films from the 1930s to the present, focusing on developing an understanding of the aesthetic qualities of the individual films, while also examining the history of French cinema, how cinema conveys meaning, and how the specificity of French culture is depicted in the films. Prerequisite: Sophomore standing or above.

#### ML&L-3330 Japanese Literature in Translation

Japanese culture through the major works in Japanese literature and its major religions, Shinto and Buddhism. The interrelationship of the art/architecture is also highlighted. Reading include early poetry and novels, the rise of drama, haiku, and twentieth century novels.

#### ML&L-3340 Russian Literature in Translation I



A study of major works of Russian literature from the early 1900s. RUSS 3305 and ML&L 3340 cannot both be taken for credit.

### ML&L-3341 Russian Literature in Translation II

A study of major works of Russian literature from the early 1900s to the present day. RUSS 3306 and ML&L 3341 cannot both be taken for credit.

### ML&L-3342 The Peoples of Russia

An introduction to Russian culture from medieval through modern times, including not only the Russians, but also the peoples of southern and eastern Russia. The course will emphasize religion, folklore and art. Prerequisite: None.

### ML&L-3343 The Culture of Russia

A survey of religion, music, architecture, folklore, and fine arts in European Russia 988-1917 CE through lectures, discussions and readings from primary sources.

### ML&L-3344 Russian Cinema

A survey of Russian films from a variety of periods with an emphasis on how the films reflect Russian history and culture, and how they illustrate the development of Russian cinema.

### ML&L-3401 Yiddish Language, Culture and Film

A survey of fundamentals and research topics in Yiddish language and its history, as well as the culture of Eastern European Jewry in its pre-Holocaust homelands and its countries of immigration. Language pedagogy, scholarship and film will be vehicles of entry into the universe of a language classified by UNESCO as "seriously endangered." (Offered occasionally).

### ML&L-3-91 Selected Topics

Special Study in fields not covered by other courses. May be repeated on different topics.

### ML&L-3350 Genres in Creative Writing

Study in the theory, technique, and practice of a variety of creative writing genres. Individual offerings may focus on poetry, fiction, or creative non-fiction. May be repeated when topics vary. ML&L 3350 and SPAN 4301 cannot both be taken for credit if the topic is the same. (Offered every year).

## Arabic

### ARAB-1401 Beginning Modern Standard Arabic I

Beginning Modern Standard Arabic I. 4 class hours a week.

### ARAB-1402 Beginning Modern Standard Arabic II

Beginning Modern Standard Arabic II. 4 class hours a week. Prerequisite: ARAB 1401 or the equivalent.

### ARAB-2301 Intermediate Modern Standard Arabic I

Intermediate Modern Standard Arabic I. 3 class hours a week. Prerequisite: ARAB 1402 or the equivalent.

### ARAB-2302 Intermediate Modern Standard Arabic II

Intermediate Modern Standard Arabic II. 3 class hours a week. Prerequisite: ARAB 2301 or the equivalent

## Chinese - Lower Division

### CHIN-1100 Conversational Chinese I

A lower division course in conversational Chinese for students enrolled in the Trinity-sponsored faculty-led study abroad program. (Offered every Spring)

### CHIN-1401 Elementary Chinese I

Modern Standard Chinese (Mandarin). 4 class hours a week. (Not open to native speakers of Mandarin.)

### CHIN-1402 Elementary Chinese II

Modern Standard Chinese (Mandarin). 4 class hours a week. (Not open to native speakers of Mandarin.)  
Prerequisite: CHIN 1401 or the equivalent.

### CHIN-2401 Intermediate Chinese I

Modern Standard Chinese (Mandarin). 4 class hours a week. (Offered every semester) Prerequisite: CHIN 1402 or the equivalent.

## CHIN-2402 Intermediate Chinese II

Modern standard Chinese (Mandarin). 4 class hours a week. (Offered every semester) Prerequisite: CHIN 2401 or the equivalent.

## CHIN-2311 Chinese Civilization

A topical approach to the study of both traditional and modern Chinese thought systems, with readings drawn mainly from original sources in translation. Course taught in English.

# Chinese - Upper Division

## CHIN-3300 Advanced Placement Credit in Chinese

Credit for a 4 or 5 on the Chinese Language AP exam.

## CHIN-3100 Conversational Chinese II

An upper division course in conversational Chinese for students enrolled in a Trinity sponsored faculty-led study abroad program. Prerequisites: CHIN 2402 or the equivalent, or Consent of Instructor

## CHIN-3401 Advanced Chinese I

Continued study of Chinese grammar and colloquial speech patterns. 4 class hours a week. (Offered every semester) Prerequisite: CHIN 2402 or the equivalent, or consent of the instructor.

## CHIN-3402 Advanced Chinese II

Continuation of CHIN 3401. 4 class hours a week. (Offered every semester). Prerequisite: CHIN 3401 or the equivalent, or consent of instructor.

## CHIN-3305 The Culture of Taiwan

This course will focus on aspects of the culture of Taiwan from the prehistoric period down to the present. Lectures and discussion will address the important topics of colonial and post-colonial history and politics, but will also cover such aspects of Taiwanese culture as linguistic diversity, folk religion, architecture, art, and cuisine. Course taught in English.

## CHIN-3310 Chengyu Tales

This course will introduce the contemporary use of "chengyu," or classical idiom, by analyzing the tales from which the phrases originated in ancient China and discussing their function in modern speech. (Offered every Spring.)

Prerequisite: CHIN 3401

### CHIN-3311 Reading Chinese Newspapers

This course develops students' newspaper reading skills in Chinese. It focuses on the history, convention, and changing face of Chinese newspapers and introduces the syntactic features of Chinese news writing. (Offered every other year.) Prerequisite: CHIN 3401

### CHIN-3312 Chinese Cinema: a Historical and Cultural Perspective

A study of Chinese culture and socio-political changes in the modern history of China, Taiwan and Hong Kong through viewing, discussing and analyzing contemporary films. Course taught in English.

### CHIN-3313 Cities of Strangers: Trans-Cultural Chinese Cinema

A cinema course with a focus on genres contributing to the popular imagination about cities such as Beijing, Shanghai, Hong Kong, and Taipei. Examples will be drawn from martial arts films, gangster films, ghost stories, and "exile" films. Major theoretical concerns are cultural stereotyping, politics of representation, and the appropriation of gender discourses. Courses taught in English.

### CHIN-3320 The Rise of Modern China

Studies of modern Chinese history since 1800, with emphasis on the processes of modernization, the major phases of the Chinese revolution from the experience with Western imperialism through the Republican period and the emergence of the People's Republic of China. Class methods emphasize reading primary sources in translation and research and writing. Course taught in English. (Also listed as HIST 1320) Prerequisite: HIST 1320 or consent of instructor.

### CHIN-3376 Contemporary Chinese Art

This course covers the development of art in China from 1976 (post-Cultural Revolution) to the present, including performance art, easel painting, concept art, women's art, etc. Aesthetic and stylistic changes will be examined in historical, societal, intellectual, and cultural contexts. (Also listed as ARTH 3376.) (Offered every Spring)

### CHIN-3428 The Philosophies of China

A study of the three major indigenous philosophical movements in China: Confucianism, Taoism, and Neo-Confucianism. Special attention will be paid to themes and problems common to all three movements, including: the metaphysics of harmony and conflict, the individual and society, the cultivation of human virtues and human perfectibility, and humankind's relation to nature. Course taught in English (Also listed as PHIL 3428) Prerequisite:

Any course in Philosophy or consent of instructor

### CHIN-3330 Global Business Culture

This course provides students with a critical and comprehensive understanding of culture-related theories and how they are applied in practice from the perspective of international managers. Emphasis is on the business culture in China in comparison to that in other countries, particularly to that in the United States. Course taught in English. (Also listed as INTB 3330.) (Offered once a year). Prerequisites: Junior standing and 6 hours of Business Administration or 6 hours of Chinese or consent of instructor.

### CHIN-3433 Chinese Religions: Unity and Diversity

Chinese 3433 explores Chinese religion through an in-depth study of its formative texts and historical evolution to the modern era. Emphasizing original sources in translation as well as critical studies by modern scholars, the course examines the cosmological framework of Chinese religion as well as attitudes towards religious belief and practice reflected in scripture, commentaries, and philosophical works. Students will conduct original research on Chinese religion in its contemporary manifestations. (Also listed as RELI 3433) Prerequisite: RELI 1330 or consent of instructor

### CHIN-3443 Chinese Foreign Policy

An examination of Chinese foreign policy by focusing on leadership, economic conditions, political settings, public opinion, and China's relations with other countries. Includes a brief exploration of the historical role of China in International Politics. Taught in English. (Also listed as PLSI 3343)

### CHIN-3366 Governance and Public Policy in Contemporary China

This course covers most significant issues of contemporary policies and public policy in China. It explores the forces changing the lives of nearly a fifth of humanity, the 1.1 billion people of China. This course is designed to be experimental in both subject and teaching methodology. In order to explore the political, economic, and social processes of liberalization that have created this new era of the increased circulation of people, ideas, commodities and technologies across national boundaries, seminar participants must use materials and methods from many scholarly disciplines and traditions: urban studies, political science, sociology, history, anthropology, economics, and media/cultural studies. In order to study these increasingly mobile populations that often fall outside the boundaries of conventional area studies approaches, students must develop innovative comparative case study and survey methodologies. (Also listed as PLSI 3366, URBS 3366).

### CHIN-3367 Comparative Views of Modern China

This course represents an overview of the most important economic relationship of the twenty-first century. The global financial crisis that started in 2008 revealed just how much the strategic relationship between China and the United States represents the heart of the world's economy. China has recently surpassed Japan to become the

world's second largest economy and America's third largest commercial partner. The rise of China has brought about a reorganization of the global economy and the international balance of power. This new world order carries challenges and opportunities. China remains a communist country with a significant legacy of a command economy. It is also a market economy. Understanding this mixture - capitalism with Chinese characteristics or the Chinese variety Capitalism - is the major aim of this course. We also cover topics relevant to the economic relationship between China and the USA, including international trade and the balance of trade, the Chinese currency system, the growth of China and its growing influence in the international sphere. (Also listed as ECON 3367, BUSN 3367, and URBS 3367).

### CHIN-4310 Advanced Conversation and Composition I

An advanced course in Chinese conversation and composition. (Offered every Fall) Prerequisite: CHIN 3402 or the equivalent.

### CHIN-4311 Advanced Conversation and Composition II

Continuation of CHIN 4310.

### CHIN-4321 Readings in Modern Chinese Literature

A study of selected works of modern Chinese literature. May be taken more than once, provided topics vary. Prerequisite: CHIN 3402 or the equivalent.

### CHIN-4322 Readings in Contemporary Chinese Cinema

This course provides a focused study of ten well-known films produced within recent decades by filmmakers from Mainland China and Taiwan. The films explore both urban and rural life, covering a wide range of topics such as education, family, revolution, modernization, and gender. Students will discuss, in both written and spoken Chinese, a variety of social topics central to studies of China. They will also complete an independent project and learn to appreciate films as historical and artistic constructs. Prerequisite: CHIN 3402 or the equivalent, or permission of instructor.

### CHIN-4130 Quanqiu Shangwu Wenhua-Zhong-Mei Jiaodian (Global Business Culture)

A companion course to BUSN/CHIN 3330 which examines the diverse business culture in China in comparison to that in other countries, particularly in the United States. This course must be taken concurrently with BUSN/CHIN 3330 and will be taught entirely in Chinese. Students must have the ability to write and converse in Chinese. (Also listed as BUSN 4130 and INTL 4130) Prerequisites: Senior Standing, CHIN 3302 or the equivalent, and Consent of Instructor Corequisite: BUSN/CHIN 3330

### CHIN-4351 Classical Chinese

A study of classical Chinese grammar with selected readings from classical Chinese literature. Prerequisite: CHIN 2402 or the equivalent.

### CHIN-4364 Internationalizing Intellectual Property

Examines theories and strategic significance of intellectual property within a global environment. Intellectual property such as patents, marks, industrial designs, and trade secrets are examined with an emphasis placed upon strategic and managerial intellectual property issues between the United States and China. Course taught in English. (Also listed as BUSN 4364). Prerequisites: Senior standing and Consent of Instructor

### CHIN-4-91 Selected Topics

Special study in fields not covered by other courses. Variations in credit according to work performed, from 1-6 hours. May be taken more than once, provided topics vary.

### CHIN-4-90 Reading & Conference

Individual work under faculty supervision not covered by other courses. Prerequisites: 6 upper division hours in Chinese and approval of Department Chair.

### CHIN-4-97 Chinese Internship

Supervised activities in Chinese appropriate to the students' abilities and interest. In the case of local internships, this will include periodic on-campus meetings with the internship supervisor to integrate internship experience with study of Chinese language. Internships abroad will require periodic reports by email or facsimile. All internships must lead to the creation of a final product such as an oral or written report. Up to 3 hours of credit. Pass/Fail. Prerequisite: Approval of the internship supervisor.

## French - Lower Division

### FREN-1401 Elementary French I

4 class hours a week for one semester.

### FREN-1402 Elementary French II

4 class hours a week for one semester.

### FREN-2301 Intermediate French I

Prerequisite: FREN 1402 or equivalent.

## FREN-2302 Intermediate French II

Prerequisite: FREN 2301 or the equivalent.

## French - Upper Division

### FREN-3300 Advanced Placement Credit in French

Credit for a 4 or 5 on the French AP exam.

### FREN-3301 Advanced Grammar

Intensive review of the rules of French grammar, as well as exceptions thereto; practical application through written and oral exercises and through reading of text materials suitable to the needs of the class. Prerequisite: FREN 2302 or the equivalent.

### FREN-3302 Advanced Conversation and Composition

This course focuses on developing and improving speaking and writing skills in a variety of contexts, with a focus on style. Students will develop a broad and fairly sophisticated range of French vocabulary. (Offered every third semester.) Prerequisite: FREN 2302 or the equivalent

### FREN-3303 French Civilization

A study of contemporary France through a variety of perspectives, including historical background, cultural, intellectual, and political traditions, and the Francophone world. Prerequisite: FREN 2302 or the equivalent, or consent of instructor.

### FREN-3305 Introduction to French Literature I

A study of major works of French literature through the eighteenth century in the context of Western literary, political, and cultural history, and literary criticism. Prerequisite: FREN 2302 or consent of instructor.

### FREN-3306 Introduction to French Literature II

A study of major works of French literature from the nineteenth century to the present in the context of Western literary, political, and cultural history, and literary criticism. Prerequisite: FREN 2302 or consent of instructor.



## FREN-3371 Introduction to Romance Linguistics

A study of the science of language as it applies to those tongues having their origin in spoken Latin, principally French, Italian, Portuguese, Rumanian, and Spanish. Attention will be given both to historical developments and to the current situations of such languages. (Same as CLAS 3371, ITAL 3371, and SPAN 3371). Prerequisite: two years or the equivalent of Latin, Ancient Greek, or a Romance language.

## FREN-3-98 Honors Readings

Independent study in selected areas in preparation for Honors Thesis. Prerequisite: Admission to Honors Program.

## FREN-4303 Topics in French Literature of the Seventeenth Century

May be taken more than once, provided topics vary. Prerequisites: FREN 3305, 3306, or the equivalent, or consent of instructor.

## FREN-4304 Topics in French Literature of the Eighteenth Century

May be taken more than once, provided topics vary. Prerequisites: FREN 3305, 3306, or the equivalent, or consent of instructor.

## FREN-4305 Topics in French Literature of the Nineteenth Century

May be taken more than once, provided topics vary. Prerequisites: FREN 3305, 3306, or the equivalent or consent of instructor.

## FREN-4306 Topics in French Literature of the Twentieth Century

May be taken more than once, provided topic vary. Prerequisites: FREN 3305, 3306, or the equivalent, or consent of instructor.

## FREN-4307 French Cinema

This course will examine a variety of French films from the 1930s to the present, focusing on developing an understanding of the aesthetic qualities of the individual films, while also examining the history of French cinema, how cinema conveys meaning, and how the specificity of French culture is depicted in the films. Prerequisite: 6 upper-division hours in French

## FREN-4308 Four Works of Nineteenth-Century Fiction

An intensive study of works of fiction by Balzac, Constant, Flaubert and Merimee. (Offered occasionally).

Prerequisite: FREN 3301 or consent of instructor

## FREN-4309 Survey to Francophone Literature

Introduction to Francophone Literature explores the literary works of French-speaking writers from three parts of the world: the Caribbean, Sub-Saharan Africa, and North Africa (Algeria, Morocco, and Tunisia). It also considers the critical, social, and cultural questions posed by a literary tradition that was born in the Colonial and Post-Colonial era. Some questions addressed will be: How do the writings of French-speaking authors from these regions define an independent national identity? How do these texts challenge the values and social norms of Colonial and Post-Colonial society? What relationship exists between these francophone authors and the French "metropole?" What narrative and stylistic innovations do these authors introduce? And, in what way have these new voices succeeded in transforming and enriching contemporary literature? Prerequisite: FREN 3305, 3306 or the equivalent, or consent of instructor.

## FREN-4-90 Reading and Conference

Individual work under faculty supervision in areas not covered by other courses. Prerequisites: 6 upper division hours in French and approval of department chair.

## FREN-4-91 Selected Topics

Special study in fields not covered by other courses. Variations in credit according to work performed, from 1-6 hours. Prerequisites: 6 upper division hours in French

## FREN-4398 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors students in both semesters of their senior year.

## FREN-4399 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors students in both semesters of their senior year.

## German - Lower Division

### GERM-1401 Elementary German I

4 class hours a week.

## GERM-1402 Elementary German II

4 class hours a week. Prerequisite: GERM 1401 or the equivalent.

## GERM-2301 Intermediate German I

Prerequisite: GERM 1402 or the equivalent.

## GERM-2302 Intermediate German II

Prerequisite: GERM 2301 or the equivalent.

## German - Upper Division

### GERM-3300 Advanced Placement Credit in German

Credit for a 4 or 5 on the German AP exam

### GERM-3301 Advanced German I

Emphasis on conversation as well as composition and grammar. Text material may reflect either literary, scientific, or business German suitable to the need of the class. Prerequisite: GERM 2302 or the equivalent.

### GERM-3302 Advanced German II

Emphasis on conversation as well as composition and grammar. Text material may reflect either literary, scientific, or business German suitable to the needs of the class. Prerequisite: GERM 3301 or the equivalent.

### GERM-3305 Introduction to German Literature and Culture I

A study of exemplary works of German literature, theater, and art that illustrate major cultural changes in German history during the late 18th and early 19th centuries. Prerequisite: GERM 2302.

### GERM-3306 Introduction to German Literature and Culture II

A study of exemplary works of German literature, theater, and film that illustrate major cultural changes in German history during the late 18th and early 19th centuries. Prerequisite: GERM 2302

### GERM-3398 Honors Readings

Independent study in selected areas in preparation for Honors Thesis. Prerequisite: Admission to Honors Program.

### GERM-4301 Genre Studies in German Literature

The study of a major genre such as the novel, drama, poetry, or the short story. May be taken more than once, provided topics vary. Prerequisite: GERM 3301 or the equivalent

### GERM-4310 Seminar in German Literature

The in-depth study of a single theme, movement, or author in German literature. May be taken more than once, provided topics vary. Prerequisite: GERM 3301 or the equivalent.

### GERM-4-90 Reading and Conference

Individual work under faculty supervision in areas not covered by other courses. Prerequisites: 6 upper division hours in German and consent of department chair.

### GERM-4-91 Selected Topics

Special study in fields not covered by other courses. Variations in credit according to work performed, from 1-6 hours. May be taken more than once, provided topics vary. Prerequisites: 6 upper division hours in German

### GERM-4398 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors student in both semesters of their senior year.

### GERM-4399 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honor students in both semesters of their senior year.

## German Studies

### GRST-1314 Art and Architecture of Medieval Europe

This course examines the art and architecture of the Middle Ages in Europe, from the earliest Christian imagery of the fourth century to late Gothic court art, produced around 1400. The geographical range extends from the northern fringes of the British Isles to the borders of the Byzantine world, and a wide selection of buildings and objects will be considered in relation to their social, political and historical contexts, with a particular focus on the

development of the Christian tradition. (Also listed as ARTH 1314) Common Curriculum: This course will only count towards Greco-Roman, Jewish, and Christian Traditions through the Early Modern Period.

### GRST-2332 Play Structure and Analysis

This course will introduce students to multiple theatrical models and methods used to understand dramatic structure and to analyze specific plays. This course seeks answer the question: How can we discover the ways in which plays work? (Also listed as THTR 2332)

### GRST-2432 European Frontiers 1848 - Present

Analyzes the shifting borders of Modern Europe, ones often accompanied by deadly consequences in the eastern two-thirds of the continent. In particular, this course will examine how physical and societal borders have been redrawn to create categories of inclusion and exclusion in Modern Europe. (Also listed as HIST 2432.) (Offered every other year).

### GRST-2352 Acting II: Scene Study

This course will focus on scene work from a variety of periods and playwrights, and in-class exercises to further the acting student's ability. (Also listed as THTR 2352). Prerequisite: THTR 1350 or 1352 and at least Sophomore standing or consent of instructor

### GRST-3401 Yiddish Language, Culture and Film

A survey of fundamentals and research topics in Yiddish language and its history, as well as the culture of Eastern European Jewery in its pre-Holocaust homelands and its countries of immigration. Language pedagogy, scholarship and film will be vehicles of entry into the universe of a language classified by UNESCO as "seriously endangered." (Offered occasionally).

### GRST-3307 Berlin: From Cabarets to Communists

This course examines Berlin's urban development and representation in art and literature from 1900 to the present. Students will explore how the city was made into a showpiece by governments with different ideologies and how writers and artists have represented it as a site of political and social struggle.

### GRST-3310 German Cinema

This course will examine German films from the silent period in the early 1920's to the present. The course will introduce basic concepts of critical film analysis, while also examining the history of German cinema, how cinema conveys meaning, and how German culture and history are reflected in films.

## GRST-3311 Fairy Tales

This course studies German fairy tales within the broad context of tales from around the world. Taught in English

## GRST-3315 Decadence: German Literature Around 1900

German and Austrian writers from 1890 to 1910 plumbed the depths of the human psyche and chronicled social conditions from working class neighborhoods to boarding schools for the elite. They saw their culture as profoundly decayed and sought to reveal how violence and lust seethed just below society's civilized surface. This course explores how key German-language authors during this period used different literary approaches, from realism to naturalism to expressionism, to address the burning psychological and political questions of their time from the role of sexual desire in the formation of self to the possibility (or threat) of working-class revolution.

## GRST-3332 History of Theatre II: From Romanticism To Performance Art

This course explores influential developments in theatre of the past two centuries, including romanticism, melodrama, realism, futurism, dada, expressionism, epic theatre, Broadway and West End musicals, American family drama, regional repertory theatres, international theatre festivals and late twentieth century experimental performance art. Using historical and critical writings, dramatic texts, photography and video resources, the course analyzes theatrical movements in their historical, aesthetic, and social contexts. (Also listed as THTR 3332) (offered every Spring)

## GRST-3334 Modern Germany

History of Modern Germany, including the Second Empire, Weimar Republic, National Socialism, two post-World War II German states, and the unified Federal Republic. (Also listed as HIST 3334)

## GRST-3338 History of the Holocaust

This course explores the origins, implementation, and legacy of the Nazi murder of six million Jews in Europe during World War II. Special attention will be paid to the motivations and actions of the perpetrators, the perspectives of the victims, and historiographical debates concerning the genocide. (Also listed as HIST 3338)

## GRST-3341 Music History I: Ancient Greece to Baroque

A survey of music in the Western art music tradition, beginning with ancient Greece and continuing through the music of the eighteenth century. Important composers covered include Bach, Handel, Vivaldi, Monteverdi, and Josquin. Although designed as Part I of a two-semester history sequence, this course may be taken independently. (Also listed as MUSC 3341.) (Offered every Fall). Prerequisite: MUSC 1204 or consent of instructor.

## GRST-3342 Music History II: Classical Era to Present

A survey of important figures and developments in Western art music from the early Classical era through the present, beginning with the music of Haydn, Mozart, and other representative figures from the later eighteenth century. Topics to be studied include the rise of the symphony genre, nineteenth-century opera, Wagner, and the influence of Beethoven on later composers. The course concludes with a sustained overview of the modern era from Mahler to Ligeti. Although designed as a continuation of Music History I, this course may be taken independently. (Also listed as MUSC 3342)(Offered every Spring). Prerequisite: MUSC 1204 or consent of instructor.

### GRST-3343 Mozart

Two centuries after his death, Wolfgang Amadeus Mozart remains one of the most compelling figures in the music history due to the extraordinary quality of the music he wrote and to the numerous legends which swirled about him from childhood onward. This course is a critical examination of Mozart's life and works. Using biographies, Mozart's own letters, and evidence in the music itself, we will explore how the image of a divinely-inspired child genius arose during his lifetime, and how that image continued to shape his reputation for later generations of listeners, including our own. (Also listed as MUSC 3350) Prerequisite: MUSC 1204 or Consent of Instructor

### GRST-3440 Northern Renaissance Art in the Fifteenth Century

The 15th Century saw an explosion in artistic production in Northern Europe. Technical advances, increasingly sophisticated markets, and an unquenchable thirst for images, meant that commissioning and owning works of art were no longer the preserve of kings and popes. The course explores this phenomenon by considering how art was made, valued, and viewed in France, Germany, and the Netherlands, from c. 1400 to c. 1500. Key themes, including the role of the alterpiece, popular devotion, technical innovations, and the international demand for Northern art, are explored through the work of Van Eyck, Van der Weyden, Memling, Schongauer, and their contemporaries. (Also listed as ARTH 3440)(Offered every other year). Prerequisite: Completion of 3 semester hours of Art History, or Sophomore standing, or consent of instructor.

### GRST-3460 German Idealism

A study of important thinkers and movements at the beginning of the 19th century. We will focus initially on Kant, and investigate how German Idealism and Romanticism developed in the aftermath of Kant's critical philosophy. After an extended treatment of Hegel, we will look at the young Hegelians and Marx. The course will focus on issues in metaphysics, epistemology, the philosophy of history and the problem of subjectivity. (Also listed as PHIL 3423.) (Offered every other year). Prerequisite: Any course in philosophy or consent of instructor.

### GRST-3461 Nietzsche and German Philosophy

A study of the important thinkers and movements at the end of the 19th century. We will focus initially on Kant before seeing how Schopenhauer and finally Nietzsche developed on the basis of the Kantian philosophy. After an extended treatment of Nietzsche, we will look at how Freud and psychoanalysis grew out of this tradition. The course will focus on issues in epistemology, the philosophy of art, the philosophy of nature, and the development

of the notion of the unconscious. (Also listed as PHIL 3426) Prerequisite: Any course in Philosophy or consent of instructor

### GRST-3470 European Politics

A study of the successes and failures, strengths and weaknesses of parliamentary democracy in various European countries during this century. (Also listed as PLSI 3430). (Offered every other year).

### GRST-3471 Comparative Political Economy of North America, Europe, and East Asia

A comparative study of the relationship between the public and private sectors in North America, Europe, and East Asia, with special emphasis on the extent to which government intervenes in the economy. (Also listed as PLSI 3431). (Offered every other year).

### GRST-3472 Masters of Suspicion: Contemporary Political Thought

A study of many of the sharpest contemporary thinkers who have been opposed to democracy or pessimistic about its prospects. This course examines some of these thinkers and then takes up the work of other prominent contemporaries who have sought to defend democracy. (Also listed as PLSI 3463). (Offered every other year).

### GRST-3435 Global City Berlin

An examination of the political tensions surrounding increased immigration to and diversity in Berlin and Germany during the past and the present. (Offered every other year.)

## Italian - Lower Division

### ITAL-1401 Elementary Italian I

4 class hours a week.

### ITAL-1402 Elementary Italian II

4 class hours a week. Prerequisite: ITAL 1401 or equivalent.

### ITAL-2301 Intermediate Italian

Prerequisite: ITAL 1402 or the equivalent, or consent of instructor.

### ITAL-2302 Reading and Composition



Prerequisite: ITAL 2301 or the equivalent, or consent of instructor.

## Italian - Upper Division

### ITAL-3371 Introduction to Romance Linguistics

A study of the science of language as it applies to those tongues having their origin in spoken Latin, principally French, Italian, Portuguese, Rumanian, and Spanish. Attention will be given both to historical developments and to the current situations of such languages. (Also listed as CLAS 3371, FREN 3371, and SPAN 3371). Prerequisite: Two years or the equivalent of Latin, Ancient Greek, or a Romance language.

### ITAL-4-90 Selected Topics

Special study in fields not covered by other courses. Variations in credit according to work performed, from 1-6 hours. Prerequisites: ITAL 2302.

## Russian - Lower Division

### RUSS-1401 Elementary Russian I

4 class hours a week.

### RUSS-1402 Elementary Russian II

4 class hours a week. Prerequisite: RUSS 1401 or the equivalent.

### RUSS-2301 Intermediate Russian I

Prerequisite: RUSS 1402 or the equivalent.

### RUSS-2302 Intermediate Russian II

Prerequisite: RUSS 2301 or the equivalent.

## Russian - Upper Division

### RUSS-3301 Advanced Russian I

An intensive review of Russian grammar, including grammatical exceptions and advanced material not covered in earlier courses. The course will consist of written and oral exercises and reading materials that illustrate the grammar. Prerequisite: RUSS 2302 or the equivalent.

### RUSS-3302 Advanced Russian II

Students choose and read articles from the Russian Press, summarize them in written form, give presentations based on their articles, and discuss the articles with classmates. The instructor provides pre-reading materials and grammar explanations as necessary. (Offered every Spring). Prerequisite: RUSS 2302, or the equivalent (as determined by the Department of Modern Language and Literatures). Prospective students with a background in Russian who have not taken RUSS 2302 should speak to one of the Russian instructors prior to registration.

### RUSS-3303 Russian Culture

A survey of the development of Russian culture from medieval through modern times. Art, architecture, music, and folklore will be emphasized. Prerequisite: RUSS 2302 or the equivalent.

### RUSS-3305 Introduction to Russian Literature I

A study of major works of Russian literature from its beginning through the early 1900s. RUSS 3305 and ML&L 3340 cannot both be taken for credit. Prerequisite: RUSS 2302 or the equivalent.

### RUSS-3306 Introduction to Russian Literature II

A study of major works of Russian literature from the early 1900s to the present day. RUSS 3306 and ML&L 3341 cannot both be taken for credit. Prerequisite: RUSS 2302 or its equivalent.

### RUSS-3398 Honors Reading

Independent study in selected areas in preparation for Honors Thesis. Prerequisite: Admission to Honors Program.

### RUSS-4301 Genre Studies in Russian Literature

The study of a major genre such as the novel, drama, poetry, or the short story. May be taken more than once, provided topics vary. Prerequisite: RUSS 2302 or the equivalent

### RUSS-4310 Seminar in Russian Literature

The in-depth study of a single theme, movement, or author in Russian literature. May be taken more than once, provided topics vary. Prerequisite: RUSS 2302 or the equivalent.

## RUSS-4-90 Readings and Conference

Individual work under faculty supervision in areas not covered by other courses. Prerequisites: RUSS 2302 or the equivalent and approval of department chair.

## RUSS-4-91 Selected Topics

Special study in fields not covered by other courses. Variations in credit according to work performed, from 1-6 hours. Prerequisites: RUSS 2302 or equivalent.

## RUSS-4398 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honor Thesis. To be taken only by senior Honors students in both semesters of their senior year.

## RUSS-4399 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by senior Honors students in both semesters of their senior year.

# Spanish - Lower Division

## SPAN-1600 Intensive Beginning Spanish

6 class hours a week

## SPAN-1403 Review of Elementary Spanish

A course designed for students who have had two to three years of high school Spanish but are not qualified for SPAN 2301. A review of the material covered normally in SPAN 1600. SPAN 1600 and 1403 cannot both be taken for credit. Prerequisite: Two to three years of high school Spanish, or the equivalent.

## SPAN-2301 Intermediate Spanish I

Prerequisite: SPAN 1600, or 1403 or the equivalent.

## SPAN-2302 Intermediate Spanish II

Prerequisite: Span 2301 or the equivalent.

## SPAN-2601 Spanish Language Immersion

The course contains an integrated study of the language and cultures of Spain and the Americas. Designed to help students acquire and strengthen Spanish language skills and cultural competence, the course will implement a systematic four-skills practice (speaking, listening, reading, and writing) and include a variety of literary and cultural readings as well as short films from Spanish speaking countries. This is a six-credit course that will be taken abroad (Spain or Latin America) as part of a Trinity faculty-led semester abroad. The class seeks to incorporate some of the planned academic experiences that students in the semester abroad will have. Successful completion of this course will fulfill the Foreign Language requirement within the Pathways curriculum. (Offered every Fall.) Prerequisite: SPAN 1600, or 1403 or the equivalent.

## Spanish - Upper Division

### SPAN-3301 Advanced Grammar

Intensive review of Spanish grammar, practical application through written and oral exercises, and through reading of appropriate text materials. Prerequisite: SPAN 2302 or the equivalent.

### SPAN-3302 Advanced Composition and Conversation

Emphasis on study of style and vocabulary. Written and oral reports in Spanish. Prerequisite: SPAN 2302 or the equivalent.

### SPAN-3303 Spanish Phonetics and Phonology

An introduction to Spanish phonetics and phonology involving both theoretical bases and practical applications. Prerequisite: SPAN 3301 or the equivalent, or consent of instructor.

### SPAN-3311 Spanish Civilization

A survey of the social, political, and culture history of Spain. Prerequisite: SPAN 2302 or the equivalent or consent of instructor.

### SPAN-3312 Latin American Civilization

A topical approach to the study of the area of Latin America, with readings and lectures on people and landscape, races, revolution, and reform, and expression through art. Prerequisite: SPAN 2302 or the equivalent, or consent of instructor.

### SPAN-3321 Spanish Cinema

An examination of a variety of Spanish films from 1960 to the present with a focus on their artistic qualities, the history of Spanish cinema, and the depictions of Spanish culture and literature in the films. Prerequisite: SPAN 2302 or the equivalent, or consent of instructor.

### SPAN-3322 Spanish American Cinema

An examination of a variety of Spanish American films with a focus on their artistic qualities, the history of Spanish American cinema, and the depictions of Spanish American culture and literature in the films. Prerequisite: SPAN 2302 or the equivalent, or consent of instructor.

### SPAN-3330 Introduction to Spanish Literature to 1700

An examination of major literary movements, authors, and works of Spanish Peninsular literature from the Middle Ages to 1700. Prerequisite: 3 upper division hours in Spanish or consent of instructor

### SPAN-3331 Introduction to Spanish Literature Since 1700

An examination of major literary movements, authors and works of Spanish Peninsular literature from 1700 to the present. Prerequisite: 3 upper division hours in Spanish or consent of instructor.

### SPAN-3332 Introduction to Spanish American Literature

An examination of major literary movements, authors and works of Spanish American literature from 1492 to the present. Prerequisite: SPAN 3301, 3302, or consent of instructor.

### SPAN-3341 Peoples of Spain

This course will examine some of the historical, political, social, and cultural dynamics of Spain focusing in particular on different social actors from the past and the present. We will pay special attention to Christians, Jews, and Muslims during the "Reconquista" and women, immigrants, and LGBTQ subjectivities in the present times and how they are represented in texts and cultural narratives. (Offered every year.) Prerequisite: SPAN 2302 or permission by instructor

### SPAN-3346 La economía española y la Unión Europea (The Spanish Economy and the European Union)

An examination of Spain's economic development and its position within the European Union. The business, economic, and political transformation of Spain from a struggling nation with an authoritarian regime to an economic power with an open and democratic society are studied. The course also examines the development of European Union, with a special focus on its influence on the Spanish business environment. The experiential component of the course includes visits to businesses, government agencies, and NGO's in Spain. (Also listed as

INTB 3346, LAC 3346, and ECON 3346) (Offered once a year). Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of the instructor.

### SPAN-3371 Introduction to Romance Linguistics

A study of the science of language as it applies to those tongues having their origin in spoken Latin, principally French, Italian, Portuguese, Rumanian, and Spanish. Attention will be given both to historical developments and to the current situations of such languages. (Same as FREN 3371, ITAL 3371, and CLAS 3371). Prerequisite: two years or the equivalent of Latin, Ancient Greek, or a Romance language.

### SPAN-3372 Practica profesional en Espana (Internship in Spain)

A supervised summer internship in Spain. Students enrolled in SPAN 3372 will serve as interns with various firms, trade groups, governmental agencies, or public interest groups where they will work and gain experience related to the Spanish economy and business world. The nature of the student's responsibilities will vary with the internship involved and be subject to the approval of the supervising faculty member. (Also listed as INTB 3372, ECON 3372, and LAC 3372). (Offered once a year). Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of instructor.

### SPAN-3-91 Special Topics

Special study in fields not covered by other courses. Variations in credit according to work performed, from 1-6 hours. Maybe repeated, provided that topics vary. Prerequisite: SPAN 2302 or the equivalent, or consent of instructor.

### SPAN-4-91 Special Topics

Special study in fields not covered by other courses. Variations in credit according to work performed, from 1-6 hours. Prerequisite: 6 upper division hours in Spanish.

### SPAN-3398 Honors Reading

Independent study in selected areas in preparation for Honors Thesis. Prerequisite: Admission to Honors Program.

### SPAN-4331 Medieval Spanish Literature

A study of the masterpieces of medieval Spanish literature up to 1500. Prerequisite: SPAN 3330 or SPAN 3331 or consent of instructor.

### SPAN-4332 Spanish Golden Age: Drama

A study of major works of Spanish Golden Age drama. Prerequisite: SPAN 3330 or SPAN 3331 or consent of the instructor.

### SPAN-4333 Don Quijote

A study of Cervantes Don Quijote de la Mancha in its literary and historical context from a variety of critical perspectives. In addition to the novel itself, the course will include considerable study of secondary sources. Prerequisite: SPAN 3330 or SPAN 3331 or consent of instructor.

### SPAN-4334 Nineteenth-Century Spanish Literature

A study of important works of Spanish Romanticism and Realism from a variety of perspectives. Authors studied include Espronceda, Zorrilla, Larra, Perez Galdos, Pardo Bazan, and Becquer. Prerequisite: SPAN 3330 or SPAN 3331 or consent of instructor.

### SPAN-4335 Hispanic Modernism

A study of major authors and works of hispanic modernism and the Generation of '98. Prerequisite: SPAN 3330 or SPAN 3331 or consent of instructor.

### SPAN-4336 Twentieth-Century Spanish Literature

A study of important works of Spanish literature of the twentieth century. Prerequisite: SPAN 3331 or the equivalent, or consent of instructor.

### SPAN-4338 Spanish Women Writers

A study of important works by Spanish women authors with emphasis on the place of these texts in the larger Spanish literary tradition. Prerequisite: SPAN 3331 or the equivalent, or consent of instructor.

### SPAN-4342 Spanish American Lit Before Modernism

A study of works from the Colonial and Postcolonial period to Modernism from a literary, historical and cultural perspective. The focus of this course will be the transition from the colonial period to the formation of national identities. Prerequisite: SPAN 3332 or the equivalent, or consent of instructor.

### SPAN-4343 Twentieth-Century Spanish American Poetry

A study of important works of major poets of the twentieth century from Modernismo and Vanguardismo to the end of the century. Prerequisite: SPAN 3332 or the equivalent, or consent of instructor.

### SPAN-4344 Twentieth-Century Spanish American Novel

A study of important works of novelists of the latter half of the twentieth century. Prerequisite: SPAN 3332 or the equivalent, or consent of instructor.

### SPAN-4345 Twentieth-Century Spanish American Short Story

A study of the important works of major short story writers of the twentieth century. Prerequisite: SPAN 3332 or the equivalent, or consent of instructor.

### SPAN-4346 Twentieth-Century Spanish American Drama

A study of important works of Spanish American drama of the twentieth century. Prerequisite: SPAN 3332 or the equivalent, or consent of instructor.

### SPAN-4347 National and Regional Literature of Spanish America

A study of works from specific nations or regions of Spanish America.

### SPAN-4348 Spanish American Women Writers

A study of important works by Spanish American women authors with emphasis on the place of these texts in the larger Spanish American literary tradition. Prerequisite: SPAN 3332 or the equivalent, or consent of instructor.

### SPAN-4349 Sexualities in Literature and Film

A study of contemporary literary and cinematographic works by authors focused on issues of gender and sexuality. This course will be taught in Spanish. Prerequisites: SPAN 3331 and 3332 or the equivalent, or consent of instructor.

### SPAN-4350 History of the Spanish Language

An examination of the development of modern Spanish out of spoken Latin. Emphasis will be placed both on external developments and their linguistic consequences, and on internal change affecting the tongue. Prerequisite: SPAN 3301 or the equivalent, or consent of instructor.

### SPAN-4351 Transnational Mexican Popular Culture

A study of important Mexican popular cultural productions (literature, film, music, television programs) from the 1930's (Post Revolutionary period) to the present through a transnational approach. This course is taught in Spanish. Prerequisites: SPAN 3332 or equivalent, or consent of instructor.



## SPAN-4-90 Reading and Conference

Individual work under faculty supervision in areas not covered by other courses. Prerequisites: 6 upper division hours in Spanish and approval of Department Chair.

## SPAN-4-97 Internship

Supervised off-campus experience in Spanish appropriate to the students' abilities and interests. Includes periodic on-campus meetings with instructor to integrate internship experience with study of Spanish language and culture. Up to 3 hours credit. Pass/Fail. Prerequisites: Approval of instructor and major advisor.

## SPAN-4398 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors thesis. To be taken only by senior Honor students in both semesters of their Senior year.

## SPAN-4399 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors thesis. To be taken only by senior Honors Students in both semesters of their Senior year.

## SPAN-4301 Genres in Creative Writing

Study in the theory, technique, and practice of a variety of creative writing genres. Individual offerings may focus on poetry, fiction, or creative non-fiction. May be repeated when topics vary. ML&L 3350 and SPAN 4301 cannot both be taken for credit if the topic is the same. (Offered every year).

# Music

## Faculty

[Brian Bondari, D.M.A.](#) , Associate Professor

[David Heller, D.M.A.](#) , Professor; Chair

[Carl Leafstedt, Ph.D.](#) , Associate Professor

[Chia-Wei Lee, D.M.A.](#) , Associate Professor

[Joseph Kneer, D.M.A.](#) , Assistant Professor

[Jacquelyn Matava, D.M.](#) , Assistant Professor

[Kimberlyn Montford, Ph.D.](#) , Associate Professor

[Diane Persellin, Ed.D.](#) , Murchison Term Professor of Music

[Gary Seighman, D.M.A.](#) , Associate Professor

[Carolyn True, D.M.A.](#) , Professor

[James Worman, Ph.D.](#) , Associate Professor

## Overview

## Degree and Degree Plans

Two degrees are offered in the field of music: Bachelor of Arts and Bachelor of Music. The degree Bachelor of Arts offers a broad and comprehensive course of study in the liberal arts. The degree Bachelor of Music offers a plan of specialization and the opportunity of attaining a high level of accomplishment with majors in performance, composition, or a five-year music education program.

A student is admitted to candidacy for the degree of Bachelor of Music or Bachelor of Arts with a major in music only upon the approval of the Department of Music. Each student, with the aid of his/her adviser, will establish a degree plan best suited to his/her own abilities and ambitions in music. Each student's degree plan must be reviewed by his/her adviser and approved by the Department of Music and the registrar by the end of the sophomore year. At this time, the student must make formal application to continue studies toward a degree in music. The sophomore year performance jury will determine upper division status and eligibility for the Bachelor of Music degree.

Requirements for All-Level Music Teacher Certification include the Bachelor of Music degree in Choral, Elementary, or Instrumental Music, and a summer and fifth year internship program, culminating in the Master of Arts in Teaching degree. Music Education students must successfully complete proficiency examinations in keyboard, vocal, and secondary instruments before being assigned to internships.

# Requirements

- [The Degree - Bachelor of Arts](#)
- [Bachelor of Music, Major in Performance](#)
- [Bachelor of Music, Major in Composition](#)
- [Bachelor of Music \(Pre-Certification\), emphasis on either Choral, Instrumental, or Elementary Music](#)
- [Minor in Music](#)
- [Music Individual Instruction Courses](#)
- [Department of Music Tuition](#)

## The Degree - Bachelor of Arts

The requirements for the degree Bachelor of Arts with a major in music are as follows:

- I. Departmental requirements: A minimum of 36 credit hours in music including: 1000 (7 semesters), 1103, 1104, 1113, 1114, 1203, 1204; 2103, 2104, 2113, 2114, 2203, 2204; 3223, 3341, 3342, 8 credits of Applied Music in one area (4 of which must be at the level of 22- or above), and 6 credits of large ensemble.
  - II. Electives sufficient to achieve 60 hours outside the Department.
  - III. University requirements completion of all other required elements of the Pathways curriculum and at least 124 credit hours (may include additional music study).
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## The Degree - Bachelor of Music, Major in Performance

- I. Departmental requirements: A minimum of 64 credit hours in music including: 1000 (7 semesters), 1103, 1104, 1113, 1114, 1203, 1204; 2103, 2104, 2113, 2114, 2203, 2204; 3121, 3223, 3302, 3341, 3342, 4221, 4301, 4321, 4322, credits of applied music in one area (12 of which must be at the level of or above), 8 credits of large ensemble, and 3 credit hours electives from upper division music courses.
  - II. Electives sufficient to achieve 60 hours outside the Department.
  - III. University requirements: completion of all other required elements of the Pathways curriculum and at least 124 credit hours.
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## The Degree- Bachelor of Music, Major in Composition

- I. Departmental Requirements A minimum of 64 credit hours in music including: 1000 (7 semesters), 1103, 1104, 1113, 1114, 1203, 1204; 2103, 2104, 2113, 2114, 2203, 2204; 3121, 3223, 3302, 3303, 3304, 3305, 3341, 3342, 4301, 4302, 4303, 14 credits of applied music in one area (10 of which must be at the level of 32- or above), 8 credits of large ensemble, and 10 credit hours elective from upper division music courses.
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- II. Electives sufficient to achieve 60 hours outside the Department.
  - III. University requirements: completion of all other required elements of the Pathways curriculum and at least 124 credit hours.
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## The Degree- Bachelor of Music (Pre-Certification), emphasis on either Choral, Instrumental, or Elementary Music

A four-year program leading to All-Level Teacher Certification upon completion of the degree, Master of Arts in Teaching (fifth year).

### I. Departmental requirements:

#### *Choral emphasis:*

A minimum of 64 credit hours in music including: 1000 (7 semesters), 1103, 1104, 1113, 1114, 1203, 1204; 2103, 2104, 2113, 2114, 2203, 2204; 3121, 3223, 3225, 3341, 3342, 4301, 10 credits of applied music in one area (4 of which must be at the level of 42– or above) and 2 credits of applied music in a secondary area, 8 credits of large ensemble, 1161, 3162, 4321, 4361, 4363, and 3 credits of music electives. In addition, 7 credit hours in Education are required, consisting of EDUC.

#### *Instrumental emphasis:*

A minimum of credit hours in music including: 1000 (7 semesters), 1103, 1104, 1113, 1114, 1203, 1204; 2103, 2104, 2113, 2114, 2203, 2204; 3121, 3223, 3224, 3341, 3342, 4301, 10 credits of applied music in one area (4 of which must be at the level of 42– or above), 1122 (or 1 credit of applied music in a secondary area), 8 credits of large ensemble, 1161, 2161, 2162, 2163, 2164, 4264, 4361, 4362, and 2 credits of music electives. In addition, 10 credit hours in Education are required, consisting of EDUC 1331, 2204, 2205, and 3320.

#### *Elementary emphasis:*

A minimum of 64 credit hours in music including: 1000 (7 semesters), 1103, 1104, 1113, 1114, 1203, 1204; 2103, 2104, 2113, 2114, 2203, 2204; 3121, 3223, 3224 or 3225, 3341, 3342, 4301, 10 credits of applied music in one area (14 of which must be at the level of 42– or above) and 2 credits of applied music in a secondary area, 8 credits of large ensemble, 1161, 3162, 4321, 4361, 4364, and 3 credits of music electives. In addition, 10 credit hours in Education are required, MUSIC | 319 consisting of EDUC 1331, 2204, 2205, and 3320.

II. Electives sufficient to achieve 60 hours outside the Department (including credits in Education). CSCI 1300 is also required.

III. All-Level Certification requirements may be met by completing a summer session and a fifth year program of studies leading to the Master of Arts in Teaching degree. A minimum of 30 credit hours in Education are required, including EDUC 5339, 5349, 5350, 5351, 5646, 5647, 5948.

IV. University Requirements: completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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## Minor in Music

This course of study is designed for the student who wishes to continue an emphasis in music to complement a major in another area. A minor in music requires a minimum of 25 hours including: 1000 (4 semesters), 1103, 1104, 1113, 1114, 1203, 1204; 3341, 3342, 4 credits of applied music in one area (2 of which must be at the level of 21– or above), 4 credits of large ensemble, and an additional 3 upper-division credits (which may be satisfied by either applied music lessons or an upper-division music course).

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## Music Individual Instruction Courses

Individual instruction is provided as follows:

- I. One three-quarter hour lesson per week for a semester earns 1 credit hour.
- II. One hour lesson per week for a semester earns 2 credit hours.

Piano and organ practice rooms are provided without additional charge to full-time students taking private lessons. Individual instruction in voice, piano, organ, harpsichord, and orchestral instruments is required for all majors and minors in music, and is available as elective study for other students. Placement in individual instruction courses is determined by audition interview. Enrollment is subject to faculty availability, as determined by the Chair; preference is given to music majors and minors. All students who enroll for private instruction in music will pay a special applied music fee of \$400.00 per semester.

All individual instruction students will attend group performance classes as scheduled by the instructor, in addition to the individual lessons.

Individual instruction courses are designated with the prefix MUSI and a four-digit course number. As usual, the first digit indicates the level and the second digit indicates the credit hours for the course. The third and fourth digits indicate the instrument, as shown below, and also indicate whether the course is for majors and minors or for non-majors and non-minors. The first pair of numbers in each instrument sequence indicates courses for majors and minors, while the second pair in each sequence indicates courses for non-majors and non-minors. Thus, for example, MUSI 2200 indicates a second year level, two credit hour individual instruction course in voice for music majors/minors, while MUSI 2102 indicates a second year level, one credit hour individual instruction course in voice for non-majors/non-minors.

Voice	–00-03	French Horn	–44-47
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Piano	-04-07	Euphonium	-48-51
Guitar	-08-11	Tuba	-52-55
Organ	-12-15	Violin	-56-59
Clarinet	-16-19	Viola	-60-63
Saxophone	-20-23	Cello	-64-67
Flute	-24-27	Double Bass	-68-71
Oboe	-28-31	Harpsichord	-72-75
Bassoon	-32-35	Harp	-76-79
Trumpet	-36-39	Percussion	-80-83
Trombone	-40-43		

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## Department of Music Tuition

Within the framework of a strong liberal arts curriculum, Trinity University provides an outstanding Department of Music. In addition to those students seeking a Bachelor of Music degree, many students apply offerings in the Department of Music toward the Bachelor of Arts degree.

Private instruction in piano, voice, organ, harpsichord, or orchestral instruments is required for all fulltime students who major or minor in music and is available as elective study for all other students. Enrollment in applied music is contingent upon the availability of instructional time as determined by the chair. All students who enroll for private instruction in music will pay a special applied music fee of \$400.00 per semester.

Approval for private instruction will be given by the chair of the Department of Music when time is available and in the following order of preference.

## Courses

## Music Ensembles

### MUSE-1185 Trinity Choir

The Trinity Choir, a select group of singers, is open to all students by audition at the opening of each semester. In addition to an annual concert tour, the Choir performs in concerts on campus and in the San Antonio area. The music performed by the Choir includes the finest accompanied and a cappella choir music of all periods, both sacred and secular. Open to all students by audition.

### MUSE-1186 Voix d'Esprit

Voix d'Esprit is Trinity's premiere all-female vocal ensemble. Open to all women by audition, this ensemble explores the case breadth of music written to display the beauty and power of the female voice. They remain active in supporting a variety of women's issues on campus and throughout the San Antonio community through service-learning. In addition, Voix d'Esprit performs at all of the main musical events on campus, including the fall and spring choral concerts, the highly popular Christmas concert and Vespers Service, and a major choral-orchestral masterwork with the Choral Union.

### MUSE-1187 Chamber Singers

The Chamber Singers is a group that performs music of a more highly specialized nature than that performed by the other choral organizations. Frequent performances are given at campus and civic functions throughout the year. Open to all students by audition.

### MUSE-1188 Men's Glee Club

The Men's Glee Club is the premiere male chorus at Trinity University. Open to all male students, this ensemble performs a wide variety of repertoire including classical, folksongs, spirituals, and popular arrangements. With a focus on camaraderie and musical excellence, the Men's Glee Club gives regular campus and community performances throughout the school year. They also perform annually with the combined choirs for the Christmas concert, Vespers Service, and Spring Choral Union Masterwork.

### MUSE-1189 Trinity Symphony Orchestra

A full orchestra, open to all qualified string, wind, and percussion students by audition. Standard orchestral literature, guest soloists, accompaniment of choral and dramatic productions. Performs on and off campus. Open to all students by audition.

### MUSE-1190 Symphonic Wind Ensemble

A select ensemble open by audition to all instrumental students at Trinity University. The Wind Symphony plays

selected music from the band repertoire and a wide variety of music for various sizes of wind ensembles. The Wind Symphony performs both on and off campus. Open to all students by audition.

### MUSE-1191 Jazz Ensemble

The Jazz Ensembles perform both contemporary and traditional jazz. The ensembles play both on and off campus. Open to all students by audition.

### MUSE-1192 Trinity University Handbell Ensemble

The Trinity University Handbell Ensemble studies the technique of English handbell ringing and performs literature composed for this medium. Open to all students by audition.

### MUSE-1193 Chamber Music Ensembles

Ensembles of string, wind, percussion, and/or keyboard instruments (with and without voices) meeting to read and rehearse, giving performances as accomplishment is attained. Open to all students by audition.

### MUSE-1194 Piano Ensemble

The preparation and performance under piano faculty supervision of the music literature involving a pianist with another performer, e.g., music for one piano-four hands or for two or more pianos. Improvement of the pianist's sight reading skills is stressed.

### MUSE-1195 Opera Workshop

A course in which the principles and techniques involved in musical stage production are applied and result in public performances. Open to all students by audition.

### MUSE-1196 Collegium Musicum

A performance course in musics of all eras. Early musical instruments will be used when possible and investigations into the performance practices of the time will be undertaken. Open to all students by audition.

### MUSE-1197 Accompanying and Chamber Music for Pianists

The study of the skills of accompanying and chamber music. The preparation and performance under piano faculty supervision of the music literature involving a pianist with another performer, e.g., piano in combination with strings, wind, organ, percussion, and/or voice. Open to all students by audition. 1 hour credit. Prerequisites: Consent of instructor



## Music Courses - Theory/Composition

### MUSC-1103 Aural Skills 1

This course will focus on developing aural recognition of the basic elements of music, e.g., intervals, chords, and rhythm, through a variety of exercises in music dictation and sight singing. Corequisites: MUSC 1203 and 1113 or consent of Instructor. Pre Requisites: MUSC 1301 or placement exam.

### MUSC-1104 Aural Skills II

A continuation of MUSC 1103. This course will continue to focus on developing aural recognition of the basic elements of diatonic music through a variety of exercises in music dictation and sight singing. Corequisites: MUSC 1204 and 1114 or consent of instructor. Prerequisites: MUSC 1103 or consent of instructor.

### MUSC-1113 Keyboard Skills 1

This course will develop basic skills in playing the keyboard that reinforce the topic presented in MUSC 1203. A variety of exercises will cover scales, chords, and progressions. Corequisites: MUSC 1203 and 1103 or consent of instructor. Prerequisite: MUSC 1301 or placement exam.

### MUSC-1114 Keyboard Skills II

A continuation of MUSC 1113. This course will develop basic skills in playing the keyboard that reinforce the topics presented in MUSC 1204. A variety of exercises will cover scales, chords, and progressions. Corequisites: MUSC 1204 and 1104 or consent of instructor. Prerequisites: MUSC 1113 or consent of instructor.

### MUSC-1203 Music Theory I

Foundations for a study of music theory and Literature. This course will include a study of the elements and forms of music, e.g., melody, harmony, and rhythm, through a variety of analytical tools that include notation. Corequisites: MUSC 1103 and MUSC 1113 or consent of instructor. Prerequisite: MUSC 1301 or placement exam.

### MUSC-1204 Music Theory II

A continuation of MUSC 1203. Foundations for a study of music theory and literature. This course will include a study of the elements and forms of music, e.g., melody, harmony, and rhythm, through a variety of analytical tools that include notation. Corequisite: MUSC 1104 and MUSC 1114 or consent of instructor. Prerequisites: MUSC 1203 or consent of instructor

### MUSC-1301 Foundations of Communication Through Music

Designed for students with little or no background in music theory, this course is an introduction to the rhythmic, melodic, and harmonic rudiments used for communication through music in Western Europe and the New World. Correlated materials in reading notation, ear-training, keyboard harmony, and original compositions are included.

### MUSC-1302 Class Composition

An introduction to composition with emphasis on creativity and basic craftsmanship. The course will include studies of selected compositions and compositional problems, and the creation of individual short works.

Prerequisite: MUSC 1301 or consent of instructor.

### MUSC-2103 Aural Skills III

A continuation of MUSC 1104. This course will focus on developing aural recognition of the elements of music in diatonic and chromatic harmony through a variety of exercises in music dictation and sight singing. Corequisites: MUSC 2203 and 2113 or consent of instructor. Prerequisites: MUSC 1104 or consent of instructor

### MUSC-2104 Aural Skills IV

A continuation of MUSC 2103. This course will focus on developing aural recognition of the elements of music in diatonic, chromatic, modal, and tonal harmony through a variety of exercises in music dictation and sight singing. Corequisites: MUSC 2204 and 2114 or consent of instructor. Prerequisites: MUSC 2103 or consent of instructor.

### MUSC-2113 Keyboard Skills III

A continuation of MUSC 1114. This course will develop basic skills in playing the keyboard that reinforce the topics presented in MUSC 2203. A variety of exercises will cover scales, chords, progressions, and score reading.

Corequisites: MUSC 2203 and 2103 or consent of instructor. Prerequisites: MUSC 1114 or consent of instructor

### MUSC-2114 Keyboard Skills IV

A continuation of MUSC 2113. This course will develop basic skills in playing the keyboard that reinforce the topics presented in MUSC 2204. A variety of exercises will cover scales, chords, progressions, and score reading.

Corequisites: MUSC 2204 and 2104 or consent of instructor. Prerequisites: MUSC 2113 or consent of instructor

### MUSC-2203 Music Theory III

A continuation of MUSC 1204. This course will focus on the trends of chromaticism in the nineteenth century Western music. Continued study of melody, harmony, rhythm, and analysis. Corequisites: MUSC 2103 and 2113 or consent of instructor. Prerequisites: MUSC 1204 or consent of instructor.

### MUSC-2204 Music Theory IV

A continuation of MUSC 2203. This course will focus on trends of chromaticism in the nineteenth century Western music and uses of tonal and atonal materials in the twentieth century. Continued study of melody, harmony, rhythm, and analysis. Corequisite: MUSC 2104 and 2114 or consent of instructor Prerequisite: MUSC 2203 or consent of instructor

### MUSC-3302 Counterpoint

A historical approach to contrapuntal techniques from Palestrina to the 20th century with special emphasis on the polyphonic works of J.S. Bach. Analysis based on an aural and visual acquaintance with contrapuntal music as well as practice in writing contrapuntal examples. Prerequisites: MUSC 2204.

### MUSC-3303 Composition

Composition in short forms for voice and solo instruments. 3 class hours a week for 2 semesters. Prerequisites: MUSC 2204 and consent of instructor.

### MUSC-3304 Composition

Composition in short forms for voice and solo instruments. 3 class hours a week for 2 semesters Prerequisites: MUSC 2204 and consent of instructor.

### MUSC-3305 Electronic Music

Instruction in the principles of electro-acoustic music, including analog and digital synthesis, sound modulation, and sound reproduction; the production of individual and group compositions; discussion of related contextual problems and a survey of recent electronic music.

### MUSC-4-11 Composition

Guidance in solution of creative and practical problems attending the composition of one or more vocal, instrumental, or music-dramatic works. Discussion of works in progress as related to classical principles and contemporary practices. 1 to 6 semesters hours. Prerequisite: Consent of instructor.

### MUSC-4-12 Composition

Guidance in solution of creative and practical problems attending the composition of one or more vocal, instrumental, or music-dramatic works. Discussion of works in progress as related to classical principles and contemporary practices. 1 to 6 hours semester hours. Prerequisite: Consent of instructor.

### MUSC-4-13 Composition

Guidance in solution of creative and practical problems attending the composition of one or more vocal, instrumental, or music-dramatic works. Discussion of works in progress as related to classical principles and contemporary practices. 1 to 6 semester hours. Prerequisite: Consent of instructor.

### MUSC-4-14 Composition

Guidance in solution of creative and practical problems attending the composition of one or more vocal, instrumental, or music-dramatic works. Discussion of works in progress as related to classical principles and contemporary practices. 1 to 6 semester hours. Prerequisite: Consent of instructor.

### MUSC-4301 Orchestration and Arranging

A study of the families of instruments and voices, including their ranges, individual colors, special devices, and methods of scoring for small and large combinations. Also, an introduction to stylistic developments in large ensemble writing from Haydn to present. Activities include score analysis, listening, and scoring and arranging exercises using selected works as models. Prerequisites: MUSC 2204

### MUSC-4302 Composition

A continuation of MUSC 3303, 3304. Composition in larger forms and for larger aggregations of voices and instruments. 3 class hours a week for 2 semesters. Prerequisites: MUSC 3304 and consent of instructor.

### MUSC-4303 Composition

A continuation of MUSC 3303, 3304. Composition in larger forms and for larger aggregations of voices and instruments. 3 class hours a week for 2 semesters. Prerequisites: MUSC 3304 and consent of instructor.

## Applied Music

### MUSC-1000 Performance Laboratory

Attendance at 10 designated musical events each semester is required of all students pursuing courses toward the completion of a major (7 semester) or minor (4 semesters) in music.

### MUSC-1121 Beginning Class Voice I

A study of the fundamentals of vocal production with lessons including breath control, posture, diction, tonal concepts and phrasing. In addition, aspects of music notation and reading will be addressed. Techniques covered in class are applied to the performance of basic solos and vocal functions in choral situations. This course does not satisfy the Class Voice requirement as stated in the Instrumental Music Education (pre-certification)

curriculum.

### MUSC-1122 Beginning Class Voice II

This course is a continuation of MUSC 1121, with a particular emphasis on aspects of vocal production related to the preparation and performance of ensemble voices in an educational setting. This course satisfies the Class Voice requirement as stated in the Instructional Music Education (pre-certification) curriculum. Prerequisite: MUSC 1121, or consent of instructor.

### MUSC-1123 Beginning Class Piano I

A study of the rudiments of piano performance designed for elementary education majors and other students who have had no previous piano study. Competency in reading music, ensemble playing, and solo repertory are stressed.

### MUSC-1124 Beginning Class Piano II

A continuation of the studies initiated in 1123 along with the introduction of harmonization of short melodies and transpositions. Spring. Prerequisite: MUSC 1123 or consent of instructor.

### MUSC-1125 Beginning Class Guitar I

A study of the rudiments of guitar performance designed for education majors and other students who have no previous guitar study. Competency in reading music, ensemble playing, and solo repertory is stressed.

### MUSC-1126 Beginning Class Guitar II

A continuation of the studies initiated in 1125. The rudiments of reading, ensemble playing, and solo repertory in guitar performance are presented in greater depth. Prerequisite: MUSC 1125 or consent of instructor.

### MUSC-2221 Repertoire Development

The selection, study, and performance of music appropriate to the student's voice or instrument in preparation for recital and public performance. May be repeated up to a total of four hours credit. Prerequisite: Consent of instructor.

### MUSC-3121 Half Recital

One half of a shared program presented in public usually during the junior or senior year. Required of all Bachelor of Music candidates. Composition students will present original works but not necessarily perform them. Prerequisite: Applied music level of 33--.

## MUSC-3221 Diction for Singers I

A study of Italian, German, French, and English diction as used in vocal performance, emphasizing preparation of selected literature. Prerequisite: MUSC 1201

## MUSC-3222 Diction for Singers II

A study of Italian, German, French, and English dictation as used in vocal performance, emphasizing preparation of selected literature. Prerequisites: MUSC 3221

## MUSC-3223 Basic Conducting

Fundamentals of score reading, baton technique and expressive gestures, and principles of score interpretation applied to selected examples of instrumental and choral literature. Prerequisite: MUSC 2204 or consent of instructor.

## MUSC-3224 Advanced Instrumental Conducting

As a continuation of MUSC 3223, areas of score study, form and analysis asymmetric meters, expressive interpretation, and advanced conducting gestures will be explored in the context of the instrumental music repertoire. Prerequisite: MUSC 3223

## MUSC-3225 Advanced Choral Conducting

As a continuation of MUSC 3223, areas of score study, form and analysis, asymmetric meters, expressive interpretation, and advanced conducting gestures will be explored in the context of the choral music repertoire. Prerequisite: MUSC 3223

## MUSC-4221 Full Recital

A full program presented in public usually during the senior year. Required for all Bachelor of Music students in performance. Prerequisite: Applied music level of 43--.

## MUSC-4321 Applied Music Pedagogy

Theories and techniques of individual music instruction applied to the teaching of performance skills on voice, keyboard or orchestral instruments. Student teaching is supervised by the instructor. May be repeated for credit in applied fields. Prerequisite: Consent of instructor.

## MUSC-4322 Applied Music Literature

Principal composers, styles and types of performance skills on voice, keyboard or orchestral instruments. May be repeated for credit in different applied fields. Prerequisite: Consent of instructor.

## History/Literature

### MUSC-1340 Introduction to Music History

An introduction to the history, styles, genres, and forms of the Western art music tradition from the Middle Ages to the twentieth century. Important composers discussed include Bach, Beethoven, Stravinsky, and Tchaikovsky. Topics include the symphony, opera, sacred music, and the avant garde. Previous musical experience is not necessary, but students will be expected to develop discriminating listening skills to enhance their understanding and appreciation of the material.

### MUSC-1341 Operas of Verdi and Wagner

A study of the life and works of two composers whose works epitomize the stylistic trends of the nineteenth-century opera. Introduces basic concepts and conventions of the art form, while exploring and contrasting their unique contributions to the genre and their influence on succeeding generations of operatic composers. Examines the dramatic experience as a result of the nationalist, philosophical, and cultural traditions from which each composer took inspiration, through such works as *Otello*, *La Traviata*, *Tristan and Isolde*, and *Die Walkure*. Previous musical experience is not necessary, but students will be expected to develop discriminating listening skills to enhance their understanding and appreciation of the material.

### MUSC-1343 Introduction to Opera

A study of opera through an examination of selected works, beginning in the seventeenth century and continuing through the present. Introduces the basic concepts and conventions of the art form, while investigating the dramatic, musical, and literary qualities that make opera such an emotionally powerful theatrical experience. Explores such operas as *The Magic Flute*, *Carmen*, and *Wozzeck*, as well as stagecraft, musical symbolism, and the production design. Previous musical experience is not necessary, but students will be expected to develop discriminating listening skills to enhance their understanding and appreciation of the material.

### MUSC-1344 Nights At the Symphony

The symphony orchestra has been at the center of musical expression in western civilization for over three hundred years. This course gives students an introduction to the world of the modern orchestra, as seen and heard in the music performed live by the San Antonio Symphony. Students will regularly attend the San Antonio Symphony's concerts during the semester. We will prepare for concerts by studying the music, composers, genres, instruments, and historical developments represented on specific concert programs. In addition, throughout the semester a handful of core repertory works such as Mozart's *Overture to Don Giovanni*, Beethoven's *Fifth Symphony*, and Strauss's *Death and Transfiguration* will be studied. The course also introduces students to the

business of running a modern orchestra through lectures and readings in arts management. (Offered every year).

### MUSC-1345 Women and Music

A historical, sociological, and artistic study of the contributions of women to the history of music in the western world from the ninth century to the present. Ability to read music is helpful. Prerequisite: Consent of instructor or MUSC 1301,1340.

### MUSC-1346 Jazz History and Styles

A study of the origins, evolution, and emergence of jazz as one of America's significant contributions to world music. The course will emphasize studies of representative works illustrating principal styles in the development of jazz as an accepted form of musical expression in American culture.

### MUSC-1347 Introduction to Film Music

An exploration of the psychology, theory, and practice of film music, this course studies the development of film scoring and the relationship of music to meaning and expressiveness in film. The class includes evaluation of different compositional styles and learning to listen critically to film scores. The course is designed so that a background in music or film history or theory is not necessary. The main requirement is a willingness to listen carefully and to articulate what you hear. (Offered every Fall).

### MUSC-1349 African American Music

A survey of the African American influences on the musical heritage of the United States. Emphasis will be given to the relation of musical style and performance to changing cultural, philosophical, and technological conditions. Popular music styles as well as art music by African American composers will be discussed. Previous musical experience is not necessary, but students will be expected to develop discriminating listening skills to enhance their understanding and appreciation of the material.

### MUSC-1351 Music Cultures of the World

An exploration of the music of various cultures around the world. Using a variety of approaches, including intensive music listening and aural analysis, core readings, and case studies, students will learn about the music cultures of selected regions within Africa, Asia, and Latin America. Each student will undertake a field project using fundamental ethnomusicological fieldwork methods, culminating in an oral/visual class presentation. This is an introductory course appropriate for non-majors as well as music students. No prior musical experience is required; students will learn and employ a vocabulary of terms for describing musical sound.

### MUSC-2301 American Musical Theater

Studies of the source materials, stage and film adaptations, and integration of musical and dramatic elements that



led to the development of the Broadway musical as an American tradition. (Also listed as THTR-2301).

### MUSC-2340 Creative Thinking and the Artistic Process

This course encourages students to synthesize a theoretical and experimental approach to the creative process as studied through the visual arts, music, creative writing, and theatre. Students enter into the creative process as a means to develop creative self-expression, aesthetic sensibility, and an understanding of the arts. The nature and drive of artistic endeavor is explored through studies of the lives of significant thinkers and artists, examinations of art works, guests lectures, and projects. Students will engage in activities and projects that will enable them to access and develop their own creative thinking skills in concert with traditional, analytic modes. (Also listed as ART 2314, THTR 2340, ENGL 2340 and GNED 2340.)

### MUSC-3341 Music History I: Ancient Greece to Baroque

A survey of music in the Western art music tradition, beginning with ancient Greece and continuing through the music of late eighteenth century. Important composers covered include Bach, Handel, Vivaldi, Monteverdi, and Josquin. Although designed as Part I of a two-semester history sequence, this course may be taken independently. (Also listed as GRST 3341.) (Offered every Fall). Prerequisite: MUSC 1204 or consent of instructor.

### MUSC-3342 Music History II: Classical Era to Present

A survey of important figures and developments in Western art music from the early Classical era through the present, beginning with the music of Haydn, Mozart, and other representative figures from the later eighteenth century. Topics to be studied include the rise of the symphony genre, nineteenth-century opera, Wagner, and the influence of Beethoven on later composers. The course concludes with a sustained overview of the modern era from Mahler to Ligeti. Although designed as a continuation of Music History I, this course may be taken independently. (also listed as GRST 3342)(Offered every Spring. Prerequisite: MUSC 1204 or consent of instructor.

### MUSC-3344 Twentieth-Century Music

A stylistic study of major composers and compositional trends in music of the Twentieth Century. Prerequisite: MUSC 1340 or consent of instructor

### MUSC-3347 The Art Song

A historical survey of the development of the Art Song by nationality as well as stylistic periods from the 17th century to the present. Ability to read music helpful. Prerequisite: MUSC 1301, 1340 or consent of instructor.

### MUSC-3349 Music and Religion

An examination of the role of music in the worship practices of the major denominations of Judaism, Islam, and Christianity. Particular emphasis will be given to the historical development within each group of liturgical forms,

important religious festivals, liturgical books and materials, and doctrinal issues related to gender, propriety of musical styles and practices, texts, and the use of instruments. The contributions of leading composers will be discussed. Prerequisite: MUSC 1301 or MUSC 1203, or consent of instructor.

### MUSC-3350 Mozart

Two centuries after his death, Wolfgang Amadeus Mozart remains one of the most compelling figures in the music history due to the extraordinary quality of the music he wrote and to the numerous legends which swirled about him from childhood onward. This course is a critical examination of Mozart's life and works. Using biographies, Mozart's own letters, and evidence in the music itself, we will explore how the image of a divinely-inspired child genius arose during his lifetime, and how that image continued to shape his reputation for later generations of listeners, including our own. (Also listed as GRST 3343) Prerequisite: MUSC 1204 or consent of instructor

### MUSC-3458 Philosophy of Music

In this course we will investigate several philosophical issues raised by music, from the question of what exactly music is, through the nature of various musical objects (works, performances, recordings), to how we should approach music, and what its value is. Throughout we will question how far the theories we discuss can be applied beyond their (typical) application to Western classical music. Students will be expected to bring their experience- as composers, performers, and listeners- to bear on the issues we discuss. Also listed as PHIL 3458. (Offered every other year). Prerequisite: Any course in Philosophy or MUSC 1301 or MUSC 1203 or consent of instructor

### MUSC-3-90 Directed Studies

Individual study and research in areas not covered by other courses. 1 to 4 semester hours. Prerequisites: 12 semester hours of music and approval of the Department Chair.

### MUSC-3-91 Special Topics in Music

Special studies in areas not covered by other courses. May be taken more than once provided the topics vary. Maximum credit six hours. Prerequisite: Consent of instructor

### MUSC-3398 Honors Readings

Independent study in selected areas in preparation for Honors Thesis. May be taken for up to three hours of credit.

### MUSC-4-90 Directed Studies

Individual study and research in areas not covered by other courses. 1 to 6 semester hours. Prerequisite: 6 semester hours of music in the upper division and approval of the Department Chair.

### MUSC-4391 Workshop or Seminar

Topics will vary depending on student interest. Titles that may recur are: A. Organ Literature B. Studies in Ornamentation. C. Performance Practice. D. Medieval and Renaissance Music. E. Curricular Developments in Secondary School Music. F. Piano Music of the Classical Period. I. Piano Music of the Romantic Period. J. 20th century Piano Music. K. Advanced Applied Music Pedagogy. Prerequisites: Consent of instructor and department chair.

### MUSC-4394 Workshop or Seminar

Topics will vary depending on student interest. Titles that may recur are: A. Organ Literature. B. Studies in Ornamentation. C. Performance Practice D. Medieval and Renaissance Music. E. Curricular Developments in Secondary School Music. F. Piano Music of the Classical Period. I. Piano Music of the Romantic Period. J. 20th Century Piano Music. K. Advanced Applied Music Pedagogy. Prerequisites: Consent of instructor and Department Chair.

### MUSC-4398 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. Prerequisite: Senior standing.

### MUSC-4399 Honors Thesis

Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. Prerequisite: Senior standing.

## Music Education

### MUSC-1161 Introduction to Music in American Schools

Objectives and procedures in learning and teaching music in the elementary and secondary schools through presentations and in school observations. Prerequisites: MUSC 1301, 1203, or consent of instructor

### MUSC-2161 Instrumental Fundamentals - Brass

A study of methods of teaching brass instruments. Through direct hands-on playing of instruments and a study of applicable method books, students will develop a fundamental knowledge and basic technique of each instrument in the brass section.

### MUSC-2162 Instrumental Fundamentals-Percussion

A study of methods of teaching percussion instruments. Through direct hands-on playing of instruments and a study of applicable method books, students will develop a fundamental knowledge and basic technique of each instrument in the percussion section.

### MUSC-2163 Instrumental Fundamentals-Strings

A study of methods of teaching string instruments. Through direct hands-on playing of instruments and a study of applicable method books, students will develop a fundamental knowledge and basic technique of each instrument in the string section.

### MUSC-2164 Instrumental Fundamentals-Woodwinds

A study of methods of teaching woodwind instruments. Through direct hands-on playing of instruments and a study of applicable method books, students will develop a fundamental knowledge and basic technique of each instrument in the woodwind section.

### MUSC-2361 Music in Childhood

A study of the instructional approaches suited to the cognitive, physical, and affective development of children in early and middle childhood. Students will acquire basic music skills and understandings in order to provide music experiences in the classroom.

### MUSC-2362 Music in Early Childhood

Identifying, understanding, and guiding musical needs of young children. Methods and materials for program development for students seeking kindergarten endorsement or interested in teaching primary grades.

### MUSC-3162 Instrumental Music Techniques

An overview of beginning orchestral and band experiences. Students will be introduced to the four families of instruments and will observe these instruments being taught in the middle schools. Prerequisite: MUSC 1161.

### MUSC-4264 Marching Band and Jazz Instrumental Practices

A study of the unique stylistic, pedagogical, and organizational demands relative to marching bands and jazz ensembles in the middle and secondary school setting. Students will develop an understanding of and personal approach to teaching and rehearsing these unique groups in the context of a music education philosophy.

Prerequisite: MUSC 2204

### MUSC-4361 Elementary Music Instructional Practices

Music programming, instruction, and organization of music in general music classes, kindergarten through eighth grade. Prerequisite: MUSC 1161

### MUSC-4362 Secondary Instrumental Music Instructional Practices

A study of the organization, functions, materials, and instructional practices relative to instrumental music ensembles in the middle and secondary school setting. Students will develop an understanding of and personal approach to teaching and rehearsing music in the context of a music educational philosophy. Prerequisites: MUSC 1161, 3223, and Senior standing.

### MUSC-4363 Secondary Choral Music Instructional Practices

A study of the organization, functions, materials, and instructional practices relative to choral music ensembles in the middle and secondary school setting. Students will develop an understanding of and personal approach to teaching and rehearsing music in the context of a music educational philosophy. Prerequisites: MUSC 1161, 3223, and Senior standing.

### MUSC-4364 Elementary Music Methods and Materials

This course will deal with the European and American music education methods such as Orff Schulwerk, Kodaly, Dalcroze Eurhythmics, Comprehensive Musicianship, and Gordon. Music education technology, global music for children, and early childhood music education will also be addressed. Prerequisite: MUSC 4361 and Senior Standing

# Neuroscience

## Faculty

[Gerard Beaudoin III, Ph.D.](#) , Assistant Professor, Biology

[Kwan Cheng, Ph.D.](#) , Williams Endowed Professor in Interdisciplinary Physics, Physics and Astronomy

[Laura M. Hunsicker-Wang, Ph.D.](#) , Associate Professor, Chemistry

[Kah-Chung Leong, Ph.D.](#) , Assistant Professor, Psychology

[Dany Munoz Pinto, Ph.D.](#) , Assistant Professor, Engineering Science

[Kimberley Phillips, Ph.D.](#) , Professor, Psychology; Director

[Carol Yoder, Ph.D.](#) , Professor, Psychology

## Overview

The Bachelor of Science in Neuroscience is a multi-disciplinary program designed to provide an understanding of the nature and functioning of the nervous system from the molecular to the behavioral level. Courses, taught by faculty from the Biology, Psychology, Chemistry, and Physics and Astronomy departments, offer a broad spectrum of topics and approaches to the study of neural systems, structure and function. The major offers an opportunity for students to engage in supervised research in neuroscience and related areas and provides valuable experience to students interested in pursuing careers in the health professions or graduate study. Double majors in neuroscience and biology are not permitted.

## Requirements

- [The Major](#)
- [Guidelines for Acceptance of Majors](#)
- [Honors Program](#)

## The Major

The requirements for the degree of Bachelor of Science with a major in neuroscience are as follows:

### I. Specific degree requirements (52-56 credit hours)

A. Core curriculum in neuroscience (9 hours):

NEUR 2310	Introduction to Neuroscience
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NEUR 2110	Neuroscience Laboratory
NEUR 3457	Neurobiology
NEUR 4000	Neuroscience Seminar (three semesters)
NEUR 4100	Neuroscience Capstone Seminar

B. Supporting courses in biology (12 hours):

BIOL 1311	Integrative Biology I
BIOL 1111	Introductory Biology Laboratory
BIOL 2312	Cells and Cell Systems
BIOL 2112	Cell Systems Laboratory
BIOL 2413	Genes, Phenotypes, and Evolutionary Dynamics

C. Supporting courses in chemistry (8 hours):

CHEM 1318	General Chemistry
CHEM 1118	Introduction to Analytical Methods
CHEM 2319	Organic Chemistry
CHEM 2119	Laboratory Methods in Organic Chemistry

D. Supporting courses in psychology (11 hours):

PSYC 1300	Principles of Psychology
PSYC 2401	Statistics and Methods I
PSYC 2402	Statistics and Methods II

E. Four elective courses from the following (12-16 hours).

Students must, in consultation with a Neuroscience advisor, develop a program of study, provide a written articulation of their academic and vocational goals, and discuss how their proposed program of study will move them toward these goals. The program of study will be presented to the committee when the major is declared. The committee will approve the program or suggested changes.

**Biology**

BIOL 3420	Animal Behavior
BIOL 3462	Vertebrate Physiology

BIOL 3463	Developmental Biology
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BIOL 3459	Endocrinology
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BIOL 3466	Cell Biology
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### **Chemistry**

CHEM 3330	Biochemistry I
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CHEM 4347	Advanced Interdisciplinary Topics: Neurochemistry
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### **Neuroscience**

NEUR 3310	Neuroethics
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NEUR 4390	Research in Neuroscience
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### **Philosophy**

PHIL 3431	Philosophy of Mind
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PHIL 3432	Philosophy of Science
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PHIL 3459	Biomedical Ethics
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### **Psychology**

PSYC 2330	Fundamentals of Cognition
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PSYC 3311	Sensation and Perception
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PSYC 3431	Memory and Cognition
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PSYC 3340	Psychopathology
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**II. University Requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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## Guidelines for Acceptance of Majors

Full acceptance in the major is granted when the following requirements are met:

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- I. Completion of NEUR 2310/2110 and PSYC 2401 with grades of C or better in each class.
- II. Completion of BIOL 1311/1111 and CHEM 1318/1118 with grades of C- or better in each class.
- III. An overall grade point average of at least 2.0.

A student may not earn a major in Neuroscience and another major in Biology. A student may not earn a major in Neuroscience and a minor in Psychology. If a student wishes to major in both Neuroscience and Psychology, a maximum of two Psychology elective courses can be used to satisfy requirements for the neurosciences major.

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## Honors Program

To be eligible for graduation with Honors in Neuroscience, students must earn a grade point average of at least 3.33 in all courses taken prior to the semester before graduation, a grade point average in neuroscience courses (core and supporting) of at least 3.50, and “A” in BIOL 4398 and 4399 or PSYC 4395 and 4396 (thesis research in Biology or Psychology).

To apply for graduation with Honors in Neuroscience, students should address a written request for consideration to the Faculty Advisory Committee. The request must be received no later than the first full week of the student’s final semester before graduation. The decision to confer or not to confer Honors will be made by the Faculty Advisory Committee and the Research Supervisor and will be based on the quality of the written thesis and its oral presentation in a colloquium.

## Courses

### NEUR-2310 Introduction to Neuroscience

A survey of basic neuroscience, starting with fundamentals of neuronal structures and ending with higher brain functions and their relations to mind and behavior. (Also listed as PSYC 2310). Prerequisite: PSYC 1300

### NEUR-2110 Neuroscience Laboratory

The neuroscience laboratory provides students with a hands-on approach to understanding the scientific method through neuroscientific techniques and data analysis, including anatomical electrophysiological, and computer simulations. Students will engage in laboratory exercises as well as in solving problem sets. This course is appropriate for both non-majors and science majors Spring semester only. (Also listed as PSYC 2110) Prerequisite

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or Corequisite: NEUR/PSYC 2310.

### NEUR-3310 Neuroethics

In this course students review and discuss ethical theories and principles, and then discuss ethical dilemmas arising from several currently devoted topics relevant to the brain, cognition, and behavior. Relevant bioethical and philosophical principles will be applied to each issue allowing students to acquire and develop skills in ethical analysis. In addition, relevant neuroanatomy, neurophysiology, and neurotechnologies will be discussed. (Also listed as PSYC 3310.) (Offered every other year.) Prerequisite: PSYC 1300 and PSYC/NEUR 2310 or Permission of Instructor

### NEUR-3360 Special Topics in Neuroscience

A specialized course periodically offered in Neuroscience Program and participating departments (Biology, Chemistry, Physics and Astronomy, and Psychology). May be repeated for up to 6 hours credit when topics vary. Prerequisite: Consent of Instructor

### NEUR-3457 Neurobiology

Neurobiology focuses on the organization and function of nervous tissues and systems. The course begins with an anatomical overview, followed by an examination of neural system function at the level of signaling and synaptic transmission, sensory systems, and central system integration and control. With this foundation, the course explores brain development and plasticity. Additional hours are required to monitor experiments. (also listed as BIOL 3457). (Offered every year). Prerequisites: BIOL 2413, NEUR 2310, and CHEM 2319, 2119

### NEUR-4000 Neuroscience Seminar

This course is built around student presentations of independent research in neuroscience (NEUR 4390) and seminars from occasional external speakers. Neuroscience majors are required to register for this course each semester of their junior and senior years. The course is also open to other students interested in neuroscience.

### NEUR-4100 Neuroscience Capstone Seminar

During the Capstone Seminar students will reflect on their Program of Study, articulate any modifications or additions made to this plan, and discuss the progress made toward meeting objectives and goals. Additionally, students are expected to attend the Neuroscience Seminar each week, participate in discussion with guest speakers, participate in professional development activities (such as preparing a c.v., personal statement), and give a presentation during Neuroscience Seminar. The underlying philosophy of the course is designed to encourage reflection and critical thinking, and to enhance written and oral communication skills. (Offered every semester.) Prerequisites: Graduating senior status and three semesters of NEUR 4000.

## NEUR-4-90 Research in Neuroscience

Independent empirical research arranged with a faculty member on problems in neuroscience. Results of the project are presented in written and oral form. A maximum of 6 semester hours is allowed. The research topic must be approved by the Faculty Advisory Committee. Prerequisites: Consent of instructor.

# New Media

## Faculty

[Brian Bondari, D.M.A.](#) , Associate Professor, Music

[Aaron Delwiche, Ph.D.](#) , Professor, Communication; Director

[Robert Huesca, Ph.D.](#) , Carlos Augustus de Lozano Professor of Journalism, Communication

[Paul Myers, Ph.D.](#) , Professor, Computer Science

[Adam Schreiber, M.F.A.](#) , Assistant Professor, Art

[Erin M. \(Bryant\) Sumner, Ph.D.](#) , Associate Professor, Human Communication and Theatre

## Overview

Trinity's interdisciplinary minor in New Media is designed to prepare students to function professionally, academically, and personally in diverse new media environments. The required courses provide a foundation upon which students build an understanding of New Media in relation to art, communication, computer science, art history, English, engineering, philosophy, psychology, and/or music. The minor promotes new media research, development, and design while preparing students for careers in new media and other fields being transformed by evolving communication technologies. Students interested in declaring a minor in New Media should contact Professor Aaron Delwiche; each student will then be assigned to a minor adviser.

## Requirements

### The Minor

The requirements for a minor in New Media are:

At least 19 credit hours, with no more than 10 hours in any one subject area, and at least 6 upper-division hours.

#### Required courses: 10 hours

ART 2452	Digital Photography
COMM 3344*	Interactive Multimedia Communication [one of three topics: 1) Web Design; 2) Interactive Narratives; 3) Mobile Gaming]
CSCI 1311	Introduction to Programming Logic (or higher level CSCI course)

**Elective courses:** 9 hours with 6 hours in "Application" and 3 hours in "Context"

**Application: 6 hours**

ART 3380	Advanced Digital Art
*COMM 3340	Media Writing: Reporting on/for the Internet
*COMM 3344	Interactive Multimedia Communication) [one of three topics not already taken: 1) Web Design; 2) Interactive Narratives; 3) Mobile Gaming]
CSCI 3353	Graphics
ENGR 1381	Engineering Analysis and Design I
MUSC 3305	Electronic Music
THTR 2313	Experiential Design

**Context: 3 hours**

ART 3314	Issues in Contemporary Art
ARTH 1408	Art History II: Renaissance to Modern Art
ARTH 3360	Twentieth-Century Art
ART 3365	Contemporary Architecture
CLAS 2406	Technology and the Classical World
COM 3328	Media, Culture, and Technology
HCOM 3332	Computer-Mediated Communication and Social Relations
PHIL 3431	Philosophy of Mind
PHIL 2455	Aesthetics
PSYC 2330	Fundamentals of Cognition
PSYC 3341	Social Psychology
THTR 2310	Principles of Design

\* Note: Courses are approved by the New Media minor committee only for the specific topic listed.

# Physical Education

## Faculty

[Joseph Shotland](#) , Director, Physical Education

## Requirements

The fitness education requirement can be fulfilled by completing one of the activity courses that are labeled PHED 11xx. In addition, PHED 1301 (Concepts of Lifetime Fitness), PHED 1106 (Sport Officiating Laboratory), and THTR 1154 (Dance for Theatre) may be used to fulfill the requirement. See the “Degree Requirements” section of the Courses of Study Bulletin for a full description of the requirement.

## Courses

### PHED-1301 Concepts of Lifetime Fitness

An analysis of the basic components of physical fitness including scientific information pertinent to the development of individualized exercise programs. Course content addresses cardiovascular endurance, muscular endurance, strength, flexibility, and weight control.

### PHED-2101 Apprentice Teaching

Provides the student with an opportunity to assist in teaching an activity course for one semester. Prerequisite: Consent of instructor. (Note: This course may be taken three times in different activities.)

### PHED-3310 Adapted and Developmental Physical Education

Adapted Physical Education develops beginning level knowledge and skills to meet individual needs in physical education, recreation, sport, fitness, and rehabilitation settings.

### PHED-3311 Essentials of Strength Training and Conditioning

This course will focus on the basic principles underlying strength training and conditioning with particular emphasis on the physiological adaptations that take place in the body as a result of this training.

### PHED-3-90 Directed Study in Physical Education

Independent study or research, or advanced selected topics in physical education that are not covered in other classes. Variations in credit according to the work performed, 1 to 3 hours. Class may be repeated for a maximum of 6 credit hour, provided the topic varies.

### PHED-2-99 Wellness Practicum

The general objectives of the course are to have students learn how to implement, coordinate, and evaluate peer led wellness programs. A key component of the wellness initiative on campus is to run programs that are led by peers (i.e., peer educator model), which increases student investment in wellness and creates leadership opportunities. The aim of this course is to provide more in depth experiential learning for students who assist in the development, coordination, and assessment of peer led wellness programs on campus. Specifically, students will gain first-hand experience with peer leader training, outreach, recruitment, social media skills, and fidelity observations. Plus, students will track, input, and analyze data from wellness workshops. Lastly, students will create and utilize partnerships and collaborations with other on campus groups.

### PHED-3303 Dance for Children

Methods of teaching dance to children through movement experiences, locomotor and nonlocomotor skills, creative, folk, square, and aerobic dance. Opportunities are provided for observation of classes in local schools and studios.

## Activity Courses

### PHED-1101 Aerobic Dance

The use of dance steps and combinations to achieve aerobic fitness. Flexibility and muscular endurance are also included.

### PHED-1102 Aerobic Fitness

Evaluation, development and implementation of a personal fitness program with emphasis on circulatory fitness.

### PHED-1103 Weight Training

Resistive training principles and methods. Isometric, isotonic and isokinetic procedures. Individual appraisal and practice.

### PHED-1104 Weight Management and Exercise

A course designed to help each student understand the basic information relative to weight management and

exercise. Based on an evaluation, each student will design and implement an exercise and nutrition program designed to lose weight.

### PHED-1105 Rape Aggression Defense

A basic self-defense course for women that provides them with the information, tactics, and skills that they can use to protect them from aggressive acts that they may encounter.

### PHED-1106 Sport Officiating Laboratory

This laboratory is designed to provide students an opportunity for practical implementation of the practices and skills learned in SPMT 1306.(Also listed as SPMT 1106). Prerequisite: SPMT 1306 or consent of instructor.

### PHED-1111 Introduction to Swimming

Fundamentals of swimming including front crawl, back crawl, elementary backstroke, breast and side strokes. Diving, treading, floating and elementary life-saving techniques are introduced.

### PHED-1112 Fitness Swimming

Advanced swimming for cardiovascular endurance. Prerequisite: PHED 1111 or consent of instructor

### PHED-1113 Life Guard Training

A course designed to teach the skills, techniques, and responsibilities of lifeguarding which fulfills the American Red Cross Lifeguard certification requirements.

### PHED-1114 Water Polo

Fundamentals of the sport of water polo including dribbling, passing, shooting, defense, etc., will be emphasized. Participation will require intermediate to advanced swimming skills.

### PHED-1121 Badminton

Fundamentals of badminton including overhead and underhand strokes, short and long serves, around the head strokes, and service returns. Rules and strategies for singles and doubles play.

### PHED-1122 Fencing I

Fundamentals of fencing including the lunge, advance and retreat, balestra, offensive and defensive positions and strategies. Rules, officiating and scoring.



## PHED-1123 Fencing II

Review of fencing, advanced fencing techniques and introduction of epee and saber. Prerequisite: PHED 1122 or Consent of Instructor

## PHED-1124 Golf I

Fundamentals of the grip, stance, swing, putting and sand shots. Club selection, rules, scoring and etiquette.

## PHED-1125 Golf II

Review of fundamentals of golf. Participation at pitch and putt and local golf courses.

## PHED-1126 Racquetball I

Basic skills of racquetball including the forehand, backhand, drive serve, lob serve, ceiling, sidewall, and backwall shots. Rules and strategies of singles and doubles play.

## PHED-1127 Racquetball II

Advanced skill development and playing strategies.

## PHED-1128 Tennis I

Fundamentals of tennis including forehand, backhand, volley, serve, and overhead. Rules and strategies for singles and doubles play.

## PHED-1129 Tennis II

Review of the basic strokes in beginning tennis and the addition of dropshot, approach shot, spins and serve variations. Singles and doubles strategies for the intermediate player.

## PHED-1130 Tennis III

Skills, strategies and drills for qualified students who wish to play at a competitive level. (student are responsible for entry fees for playing local tournaments.) Prerequisite: Organized competitive experience.

## PHED-1131 Trap and Skeet I

Fundamental skills of skeet and trap shooting including position, tracking, aiming, leading, and firing. Firearms safety will be covered in relation to all firearm sports.

## PHED-1132 Trap and Skeet II

Advanced techniques of trap and skeet shooting including the mental aspects of competition, advanced skills, equipment care and safety factors. Prerequisite: PHED 1131 or consent of instructor

## PHED-1133 Triathlon Training

A course designed to teach the skills, techniques, and training principles necessary to prepare for participation in the sport of triathlon: swimming/cycling/running.

## PHED-1134 Conditioning and Weight Training

A course designed to teach students how to develop and implement a comprehensive exercise program that includes both aerobic fitness and weight training.

## PHED-1135 Cardio Kickboxing

This course is designed to use intermediate techniques of cardio kickboxing skills to improve cardio respiratory endurance, muscular strength and endurance, anaerobic threshold, and body composition. Training will consist of intermediate to advanced techniques in cardio kickboxing and contact strikes using gloves and punching bags. Traditional activities such as calisthenics, resistance training, jump rope training, and core muscle training will be included. Principles of interval training will be taught as well as theories of weight management, chronic and acute disease prevention, stress management, and basic anatomy and kinesiology.

## PHED-1136 Introduction to Hatha Yoga

This course teaches the basics of Hatha Yoga. Students learn techniques for developing strength flexibility, and control through the use of basic postures, combinations and relaxation.

## PHED-1138 Continuing Studies in Hatha Yoga

This course continues the study of Hatha yoga. The more intense practice will help each student increase strength, flexibility and endurance. Students will gain a greater understanding of how to incorporate yoga into their lives. new concepts, including strategies for a healthy lifestyle, will also be explored. Prerequisite: PHED 1136.

## PHED-1139 Training for Speed, Power, and Agility

This course is designed to teach students how to develop and implement a comprehensive training program designed specifically for development of speed, agility and power where the emphasis is on Plyometrics and other high-intensity activities.

## PHED-1141 Basketball

Fundamentals of basketball including passing, dribbling, shooting and rebounding. Offensive and defensive drills, team play, rules and strategies.

## PHED-1142 Soccer I

Beginning fundamentals of soccer including soccer techniques, soccer tactics, soccer fitness, soccer psychology, rules and history.

## PHED-1143 Soccer II

Review of basic fundamentals and advanced play. Prerequisite: PHED 1142 or consent of the instructor

## PHED-1144 Volleyball I

Power volleyball: the skills of the pass, serve, set, attack, block and floor defense. Rules and strategies for team play.

## PHED-1145 Volleyball II

Review of basic skills of volleyball. Introduction to advanced skills and strategies.

## PHED-1146 Roller Skating I

This course is designed to teach students the basic skills they need to participate in Roller Skating as part of a healthy active lifestyle.

## PHED-1147 Roller Skating II

Introduction to advanced quad-roller skating techniques.

## PHED-1151 Ballet I

History of ballet, basic technique, vocabulary, combinations and style. Local concerts and critiques.

## PHED-1152 Ballet II

Advanced ballet technique, center combinations and variations. Comparison of major companies and performers.

## PHED-1153 Ballroom Dance I

Basic steps and variations for the following dances: fox trot, waltz, swing, polka, rhumba, cha cha, samba tango, mambo and merengue. Rhythmical analysis, music recognition and techniques of leading and following.

#### PHED-1154 Ballroom Dance II

Review of ballroom dance, advanced techniques and variations for American and Latin dances.

#### PHED-1155 Country/Western Dance I

Basic steps and variations for the following dances: cotton eyed joe, schottische, western two step, western waltz, Texas two step, Texas two step swing, western swing, western polka, put your little foot and 10-step polka. Rhythmical analysis and techniques of leading and following.

#### PHED-1156 Country/Western Dance II

A continuation of Country/Western Dance I. Includes advanced variations and sequenced combinations.

#### PHED-1157 Country/Western Dance III

Performance level of country/western dance. Audition required.

#### PHED-1158 Jazz

Beginning elements of technique, vocabulary and style. History of jazz, differing styles of technique and study of performers who have influenced jazz.

#### PHED-1159 Modern Dance I

Beginning techniques and composition of modern dance.

#### PHED-1160 Introduction to Running

Introduces the basic running principles of running and prepares students to complete a 5 kilometer race by the end of the course.

#### PHED-1161 Half Marathon Challenge

Introduces the advanced training principles of running and prepares the student to complete a Half Marathon by the end of the course.

#### PHED-1162 Cardio Tennis

In this course, students will improve their physical fitness as well as their tennis skills by engaging in dynamic, high energy tennis drills in a group environment.

### PHED-1163 Baseball

An introduction to the fundamentals of baseball including the history, rules, regulations, techniques, and mechanics.

### PHED-1164 Springboard Diving

An introduction to the fundamentals of springboard and dry-land diving.

### PHED-1165 Intramural Programming

In this course, students will plan and participate in new recreational opportunities. Students will create an event and teach their classmates the rules, regulations, and policies for that particular sport or recreation activity and then participate in that event as a group.

### PHED-1166 Body Pump

This course combines strength training and aerobic conditioning in one class through the use of dumbbells, weight bars, and a step platform. This course will be taught in a high-energy environment.

### PHED-1167 Cardio Bootcamp

This course is an intermediate form of physical conditioning which combines high energy cardio-respiratory activity with military-style physical training to improve muscular endurance, cardio-respiratory endurance, flexibility, and body composition.

### PHED-1168 Pilates

This class focuses on physical conditioning based on the theories and principles of Joseph H. Pilates. Mat-work principles incorporate exercises that increase muscular strength, muscular endurance, flexibility, balance, and coordination.

### PHED-1169 Tap Dance

This course is designed for the beginning or intermediate tap dancer to learn or perfect tap dance technique.

### PHED-1170 Lyrical Dance

Introduction into Lyrical style dance. This course is designed to teach continuing technique and terminology to the intermediate dancer. The instructor hopes to educate dancers on the nuances of lyrical and allow students to form a great appreciation of the style. (Offered every semester.) Prerequisites: PHED 1151, 1158, or consent of instructor

## PHED-1171 Basketball II

Review of basic fundamentals and advanced play. Designed for students who have played previously and want to continue in their development. (Offered occasionally.) Prerequisite: PHED 1141 or consent of the instructor.

# Philosophy

## Faculty

[Curtis Brown, Ph.D.](#) , Professor

[Damian Caluori, D.Phil.](#) , Associate Professor

[Rachel Johnson, Ph.D.](#) , Assistant Professor

[Andrew Kania, Ph.D.](#) , Professor

[Steven Luper, Ph.D.](#) , Professor; Chair

[Judith Norman, Ph.D.](#) , Professor

## Requirements

- [The Major](#)
- [The Minors](#)
- [Departmental Honors Program](#)

## The Major

To be accepted as a major in philosophy, students must have taken three hours in philosophy. The requirements for the degree of Bachelor of Arts with a major in philosophy are as follows:

### I. Departmental requirements

A. 34 hours in philosophy, at least 24 of which must be upper division.

B. All of the following three courses:

PHIL 2340	Symbolic Logic I
PHIL 3410	Classical Greek Philosophy
PHIL 3422	Early Modern Philosophy

C. One of the following two courses:

PHIL 3430	Metaphysics
PHIL 3439	Epistemology

D. One of the following four courses:

PHIL 4491	Seminar on a Philosophical Problem
PHIL 4492	Seminar on a Philosopher
PHIL 4493	Seminar on a Philosophical Movement
PHIL 4395	Senior Thesis

**II. Electives sufficient to total 124 hours.**

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## The Minors

Students may choose from the following four minors in philosophy:

### I. Minor in Philosophy

The requirements for a minor in philosophy are as follows:

- A. 18 hours in philosophy, 12 of which must be upper division.
- B. One of the following two courses:

PHIL 3410	Classical Greek Philosophy
PHIL 3422	Early Modern Philosophy

### II. Minor in Ethics

The requirements for a minor in ethics are as follows:

- A. 18 hours in philosophy, of which at least 12 must be upper division.
- B. Three of the following courses:

PHIL 1350	Environmental Ethics
PHIL 2457	Meaning of Life
PHIL 3450	Metaethics
PHIL 3451	Social and Political Philosophy
PHIL 3452	Ethical Theory
PHIL 3453	Philosophy of Law
PHIL 3454	Philosophy of Gender



### III. Minor in Philosophy of Art

The requirements for a minor in philosophy of art are as follows:

- A. 18 hours in philosophy, of which at least 12 must be upper division.
- B. Three of the following courses:

PHIL 2455	Aesthetics
PHIL 3457	Philosophy of Film
PHIL 3458	Philosophy of Music
PHIL 3460	Philosophy of Literature

### IV. Minor in Logic and the Philosophy of Cognition

The requirements for the minor in logic and the philosophy of cognition are as follows:

- A. 18 hours in philosophy, of which at least 12 must be upper division.
- B. PHIL 2340 Symbolic Logic I
- C. Three of the following courses:

PHIL 1341	Tools for Reasoning
PHIL 3431	Philosophy of Mind
PHIL 3432	Philosophy of Science
PHIL 3439	Epistemology
PHIL 3340	Symbolic Logic II
PHIL 3343	Nonclassical Logics

### V. Minor in the History of Philosophy

The requirements for a minor in the history of philosophy are as follows:

- A. 18 hours in philosophy, of which at least 12 must be upper division.
- B. PHIL 3410 Classical Greek Philosophy
- C. PHIL 3422 Early Modern Philosophy

D. At least 2 of the following courses:

PHIL 2425	Existentialism
PHIL 3411	Hellenistic Philosophy
PHIL 3412	Late Ancient and Medieval Philosophy
PHIL 3423	German Idealism
PHIL 3426	Nietzsche and German Philosophy
PHIL 3429	Continental Philosophy

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## Departmental Honors Program

I. To be accepted into the Department Honors Program, students must be philosophy majors who have a cumulative grade-point average of 3.33, and a grade-point average of 3.75 within the department, at the end of the Fall semester of the Junior year. Such students may request admission to the Honors Program. The request should be in writing and should be submitted to the chair of the department at the end of the Fall semester of the Junior year. The request should be accompanied by a report from the Registrar's Office, showing their grade-point averages. The members of the philosophy department will decide which students are accepted.

II. To receive Departmental Honors, majors in philosophy must (i) have, at graduation, a grade-point average of 3.75 within the department and a cumulative grade-point average of 3.33; (ii) complete the requirements for the major; (iii) take a comprehensive exam; and (iv) complete the following courses:

A. PHIL 3439 Epistemology

B. At least one of the following:

PHIL 3430	Metaphysics
PHIL 3431	Philosophy of Mind
PHIL 3433	Philosophy of Language

C. At least one of the following:

PHIL 3450	Metaethics
PHIL 3451	Social and Political Philosophy
PHIL 3452	Ethical Theory

D. At least one of the following:

PHIL 3423	German Idealism
PHIL 3426	Nietzsche and German Philosophy
PHIL 3429	Continental Philosophy

E. At least one of the following (preferably all three):

1. An intermediate-level course in German, French, or Greek
2. PHIL 3340 Symbolic Logic II
3. A course in mathematics at the level of MATH 1311 (Calculus I) or higher

F. PHIL 4396 Thesis I

G. PHIL 4397 Thesis II

## Courses

### Lower Division

#### PHIL-1301 Introduction to Philosophy

An introduction to philosophy, emphasizing central issues in epistemology, metaphysics, and ethics. Typical topics include: the problem of evil, the mind-body problem, the possibility of knowledge, the existence of God, personal identity, freedom and determinism, the good life, and what makes actions right or wrong.

#### PHIL-1341 Tools for Reasoning

Reasoning is the process of using the evidence available to us in order to make informed decisions about what to believe and do. Good reasoning requires the ability to identify and assess deductive arguments; to formulate hypotheses, test them, and choose those that are best supported by the evidence; and to assess which courses of action are most reasonable given our beliefs and values. This class will introduce a number of tools that are useful for reasoning, including deductive logic, probability and statistics, and decision theory. The course will also consider problem-solving techniques and ways of evaluating the credibility of sources.

#### PHIL-1350 Environmental Ethics

A study of the moral status of the things and creatures that make up the environment, and their moral relationship to people. Particular attention will be given to the responsibilities of people to protect and preserve the

environment, and to conserve resources for future generations. (Offered every year).

### PHIL-1354 Ethics

An introduction to traditional and contemporary problems and theories in ethics.

### PHIL-1359 Professional Ethics

A critical Examination of ethics and ethical issues involved in professional life. Typical topics will include the following: ethical theory, theory of justice, professional codes of conduct, corporate responsibility, harassment policy, affirmative action, the moral status of animals, experimentation using animal and human subjects, the physician-patient relationship, reproductive ethics, and health care policy. (Also listed as BUSN 2359) PHIL 1354 and PHIL 2359 may not both be taken for credit.

### PHIL-2425 Existentialism

The development of existential thought from the writings of Kierkegaard and Nietzsche to more recent work by Heidegger, Sartre, and Camus. (Offered every other year).

### PHIL-2438 Philosophy of Religion

A critical discussion of philosophical issues arising in religion and theology. Typical topics covered include: religious language, arguments for God's existence, religious experience, miracles and revelation, the relationship of faith and reason, the nature of God, the problem of evil, death and immortality. (Also listed as RELI 2460)

### PHIL-2340 Symbolic Logic I

An introduction to formal deductive logic, covering propositional logic (truth-functional logic) and first-order predicate logic (quantification theory). Typical topics covered include: techniques of symbolization, truth tables, validity and soundness, and techniques of natural deduction. Symbolic notation is used extensively. Does not require 1341 as a prerequisite.

### PHIL-2455 Aesthetics

A study of issues in the philosophy of the arts, through the examination of works of art and the reading of historical and contemporary philosophers and critics. Topics to be discussed include: what makes something a work of art, the nature of artistic representation, the evaluation of works of art, and problems peculiar to such specific art forms as literature, painting, music, and film.

### PHIL-2456 Applied Ethics

An application of ethical theory to a particular moral issue. Each offering will focus on a specific issue or a set of closely related issues; topics will vary from one offering to the next. Examples of topics which may be covered include: abortion; genetic engineering; environmental justice; urban issues such as group discrimination, housing restrictions, regulation of vice, and city planning; and truth in advertising and whistle blowing.

### PHIL-2457 The Meaning of Life

A critical examination of a wide range of approaches to the question, "Does life have meaning?" Among the philosophers to be covered are Aristotle, Tolstoy, Kant, Schopenhauer, Nietzsche, Camus, Miguel de Unamuno, and Thomas Nagel.

### PHIL-2460 Ancient Science and Medicine

An overview of science and medicine in antiquity, with an emphasis on its relation to ancient philosophy. Topics typically include: astronomy, cosmology, physics, biology, and medicine. The course will focus on such figures as Anaximander, Hippocrates, Plato, Aristotle, Eudoxus, Hierophilus, Ptolemy, and Galen. (Offered every other year.)

## Upper Division - History of Philosophy

### PHIL-3410 Classical Greek Philosophy

A study of the major figures in ancient Greek philosophy from Thales to Aristotle, with a special focus on thinkers of the high classical period: Socrates, Plato, and Aristotle. Prerequisite: Any course in Philosophy or consent of instructor

### PHIL-3411 Hellenistic Philosophy

A study of the dominant philosophical schools after the death of Aristotle - Stoics, Epicureans, and Skeptics - with a particular emphasis on ethics (virtue ethics, hedonism) and epistemology. Prerequisite: Any course in Philosophy or Consent of Instructor.

### PHIL-3412 Late Ancient and Medieval Philosophy

A study of philosophical problems that arose in the historical and intellectual context of Late Antiquity and the Middle Ages. The course will include topics in metaphysics, philosophy of religion, ethics, and mysticism. It will emphasize the ancient origins of Medieval thought, and clarify the intellectual roots of Christianity by discussion of the key notions, ideas and figures that crucially contributed to shaping Western culture. (Offered every other year). Prerequisite: Any course in Philosophy or consent of instructor

### PHIL-3422 Early Modern Philosophy

A study of the classical modern philosophers, including the Rationalists: Descartes, Leibniz, and Spinoza; the Empiricists: Locke, Berkeley, and Hume; and the attempted synthesis of Kant. (Offered every year). Prerequisite: Any course in Philosophy or consent of instructor

### PHIL-3423 German Idealism

A study of important thinkers and movements at the beginning of the 19th century. We will focus initially on Kant, and investigate how German Idealism and Romanticism developed in the aftermath of Kant's critical philosophy. After an extended treatment of Hegel, we will look at the young Hegelians and Marx. The course will focus on issues in metaphysics, epistemology, the philosophy of history and the problem of subjectivity. (Also listed as GRST 3460.) (Offered every other year). Prerequisite: Any course in philosophy or consent of instructor.

### PHIL-3426 Nietzsche and German Philosophy

A study of the important thinkers and movements at the end of the 19th century. We will focus initially on Kant before seeing how Schopenhauer and finally Nietzsche developed on the basis of the Kantian philosophy. After an extended treatment of Nietzsche, we will look at how Freud and psychoanalysis grew out of this tradition. The course will focus on issues in epistemology, the philosophy of art, the philosophy of nature, and the development of the notion of the unconscious. (Also listed as GRST 3461). (Offered every other year). Prerequisite: Any course in Philosophy or consent of instructor

### PHIL-3428 The Philosophies of China

A study of the three major indigenous philosophical movements in China: Confucianism, Taoism, and Neo-Confucianism. Special attention will be paid to themes and problems common to all three movements, including: the metaphysics of harmony and conflict, the individual and society the cultivation of human virtues and human perfectibility, and humankind's relation to nature. Course taught in English. (Also listed as CHIN 3428) (Offered occasionally). Prerequisite: Any course in Philosophy or consent of instructor

### PHIL-3429 Continental Philosophy

A close reading of some of the major texts of twentieth-century French and German philosophy, with some attention to their roots in nineteenth-century philosophy. Prerequisites: Any course in Philosophy or consent of instructor

## Upper Division - Metaphysics and Epistemology

### PHIL-3430 Metaphysics

A survey of traditional and contemporary philosophical issues about the nature of reality. Typical topics covered

include some of the following: the mind-body problem, personal identity, free will and determinism, causation, time, fatalism, universals and particulars, essentialism, possible worlds. (Offered every other year). Prerequisites: Any course in Philosophy or Consent of Instructor

### PHIL-3431 Philosophy of Mind

A critical study of contemporary approaches to the mind-body problem, including dualism, behaviorism, the identity theory, and functionalism. Also addressed will be such other issues as the nature of mental representation, the possibility of artificial intelligence, and the sources of intentionality. (Offered every other year). Prerequisite: Any course in Philosophy or consent of instructor

### PHIL-3432 Philosophy of Science

A study of philosophical views about the sciences. Topics may include: explanation, confirmation, the historical development of science, realism vs. anti-realism, the relation between the natural and social sciences, and the difference between science and pseudo-science. (Offered every other year). Prerequisites: Both PHIL 2340 and an additional course in philosophy; or 9 hours in any one of the natural or social sciences

### PHIL-3433 Philosophy of Language

A critical study of contemporary issues about language, meaning, reference, translation, and interpretation. (Offered every other year). Prerequisites: Both PHIL 2340 and an additional course in philosophy or consent of instructor

### PHIL-3439 Epistemology

A critical study of problems in the theory of knowledge, such as: the difference between knowledge and belief; the possibility of knowledge; the conditions under which a belief is rational. Prerequisites: Any course in Philosophy or consent of instructor

## Upper Division - Advanced Logic

### PHIL-3340 Symbolic Logic II

PHIL 3340, Symbolic Logic II, Topics include: Review of first-order logic from a more abstract perspective than that taken in PHIL 2340; introduction to set theory; basic metalogical results including soundness, completeness, compactness, the Lowenheim-Skolem theorem, and Godel's incompleteness theorems; connections with issues in computability theory and the foundations of mathematics. Prerequisite: PHIL 2340 or consent of instructor, or CSCI 1323.

## PHIL-3343 Nonclassical Logics

Extensions of, and alternatives to, classical logic. Possible topics include modal logic, intuitionistic logic, many-valued logic, and fuzzy logic. Some attention is paid to connections between these logics and topics in philosophy, computer science, and linguistics. Prerequisite: PHIL 2340 or consent of instructor

## Upper Division - Value Theory

### PHIL-3450 Metaethics

A study of contemporary attempts to answer the question of whether there are moral facts or whether any moral claims are objective. (Offered every other year) Prerequisite: Any course in Philosophy or the consent of instructor.

### PHIL-3451 Social and Political Philosophy

A critical study of philosophical views about society and politics, with particular attention to the concepts of sovereignty, obligation, rights, justice, equality, and liberty. Prerequisite: Any course in Philosophy or consent of instructor

### PHIL-3452 Ethical Theory

A discussion of issues in normative ethics and metaethics. Typical topics covered include some of the following: the meaning of ethical terms, the justification of moral principles and judgments, intrinsic and extrinsic value, consequentialism and deontology, moral relativism, natural rights, theories of justice. Prerequisite: Any course in Philosophy or consent of instructor

### PHIL-3453 Philosophy of Law

A critical study of legal theory, legal reasoning, and the role of law in contemporary society. Prerequisite: Any course in Philosophy or consent of instructor

### PHIL-3454 Philosophy of Gender

A study of issues in the philosophy of gender, through reading the work of historical and contemporary theorists. Topics may include the ontology of sex, gender, and sexuality; the nature and goals of feminism; gendered language; same-sex marriage; the ethics of consent; pornography; and prostitution. (Offered every other year). Prerequisite: Any course in Philosophy or WAGS 2310, 2350, 2351, or 2352, or consent of instructor

### PHIL-3456 Marx and Marxism



In this class, students will study the ideas of Karl Marx and the impact they have had on 20th century thought. The class will have two components: the philosophy of Marx and the contemporary application of Marxist principles to various problems and disciplines. Prerequisite: Any course in Philosophy or consent of instructor

### PHIL-3457 Philosophy of Film

A study of issues in the philosophy of film, through reading the work of historical and contemporary philosophers and critics, and studying films. Topics may include: the nature of film, its status amongst the arts, issues of authorship and narrativity, issues of interpretation, and the nature and ethics of documentary. (offered every other year). Prerequisite: Any course in Philosophy, or Introduction to Film Studies (COMM 1302 or FILM 1301), or International Cinema (COMM 2301 or FILM 2301), or consent of Instructor.

### PHIL-3458 Philosophy of Music

In this course we will investigate several philosophical issues raised by music, from the question of what exactly music is, through the nature of various musical objects (works, performances, recordings), to how we should approach music, and what its value is. Throughout we will question how far the theories we discuss can be applied beyond their (typical) application to Western classical music. Students will be expected to bring their experience- as composers, performers, and listeners- to bear on the issues we discuss. Also listed as MUSC 3458. (Offered every other year.) Prerequisite: Any course in Philosophy or MUSC 1301 or MUSC 1203 or consent of instructor

### PHIL-3459 Biomedical Ethics

A study of ethical issues associated with the practice of medicine and the pursuit of biomedical research. Topics may include: physicians' obligations and patients' rights; experimentation on humans and animals; assisted suicide; euthanasia; abortion and parental rights; genetic engineering; and social justice and the right to health care.

### PHIL-3460 Philosophy of Literature

In this course we will investigate several philosophical issues raised by literature, such as what exactly literature is, the nature of literary authorship and interpretation, why it is we respond emotionally to fictional characters, and what the value of engaging with literature is. (Offered every other year). Prerequisite: Any course in Philosophy or six hours of English or consent of instructor

### PHIL-3361 Theorizing Myth

A survey of theoretical approaches to myth from the eighteenth century to the present. This survey begins with the transition from renaissance belief that myth is a form of moral instruction conveyed by allegory to the romantic belief that myth is a symbolic mode of discourse offering insight into transcendental reality. We will then chart the evolution of this approach, beginning with its inspiration in Kantian metaphysics and earliest formulations by German romantics such as Schiller and proceeding on to Freud and Ricoeur. A second strand begins with Hegel's

theories of "false consciousness" that would in time develop into interpretations of myth as ideology, under the influence of Marx, Adorno, and Althusser. A final strand begins with the early folklorists, the brothers Grimm, and would in time develop into functionalist approaches to myth by anthropologists such as Malinowski, Boas, and Levi-Strauss. The resulting big picture is as much an intellectual history of modernity as a history of theorizing myth. (Also listed as CLAS 3350) Prerequisites: Sophomore standing or consent of instructor.

## Seminars and Special Courses

### PHIL-3-80 Philosophy for Children

This is a service learning class in which students learn the theory and practice of teaching philosophy to children. Students will attend a weekly class at Trinity in which they study and discuss educational theory, and learn about methods for teaching children philosophy. They also create and discuss various lesson plans. They then visit a public school where they meet with small groups of children and lead discussions of philosophy. May be repeated for credit. 1 to 3 semester hours. Prerequisites: One course in Philosophy or Education or consent of instructor.

### PHIL-3-90 Directed Studies

Individual work under faculty supervision. 1 to 4 semester hours. Prerequisite: Consent of instructor.

### PHIL-3-91 Internship in Law and Philosophy

Students taking this class will work for various law or government offices as interns whose responsibilities will be determined by those offices and by supervising faculty. They will then complete a writing assignment in which they relate their experience in the internship to issues in ethics, social and political philosophy, and/or the philosophy of law. Pass/Fail only. Prerequisite: Consent of Instructor

### PHIL-4180 Readings in Ancient Philosophy

A close reading of a classical text of ancient philosophy by Plato, Aristotle, Plotinus or other major figures of ancient philosophy. Pass/Fail only. May be repeated for credit. (Offered every semester.) Prerequisite: PHIL-3410 Classical Greek Philosophy and consent of instructor.

### PHIL-4-90 Directed Studies

Individual work under faculty supervision. 1 to 4 semester hours. Prerequisite: Consent of instructor.

### PHIL-4491 Seminar on a Philosophical Problem

An in-depth study of a contemporary problem in philosophy. Prerequisite: 8 upper-division hours or consent of

instructor.

### PHIL-4492 Seminar on a Philosopher

A careful analysis of the work of a particular philosopher. Topics may vary but include: A. Aristotle; B. Austin; D. Descartes; E. Hegel F. Locke; K. Kant; M. Marx; P. Plato; W. Wittgenstein; Z. other figures. Prerequisite: 8 upper-division hours in Philosophy or consent of instructor

### PHIL-4493 Seminar on a Philosophical Movement

An intensive study of works of the philosophers in a particular philosophical school or movement. The seminar may take a chronological approach or it may be topical in structure. Prerequisite: 8 upper-division hours in philosophy.

### PHIL-4395 Senior Thesis

Research and classroom discussion culminating, for each student, in a thesis to be defended before Philosophy Department faculty. Supervision for thesis provided by course instructor and a second faculty member with expertise in student's area of research. Prerequisites: Senior Standing and consent of the department chair.

### PHIL-4396 Thesis I

Taken during the Spring semester of the Junior year. Students draft a thesis under the supervision of a faculty member. The completed draft will be defended before the members of the department, who will decide whether it should be developed further. Students who do outstanding work in Thesis I will be invited to enroll in Thesis II. Students who take Thesis II are not eligible to enroll in PHIL 4395 (Senior Thesis). Requires consent of chair and Instructor.

### PHIL-4397 Thesis II

Taken during the Fall semester of the Senior Year. In thesis II students will complete the theses that they drafted in Thesis I. The completed essay will be defended before the members of the department, who will decide whether to confer Departmental Honors. Requires Consent of Department chair and Instructor, and completion of PHIL 4396.

# Physics and Astronomy

## Faculty

[Kwan Cheng, Ph.D.](#) , Williams Endowed Professor in Interdisciplinary Physics

[Nirav Mehta, Ph.D.](#) , Associate Professor

[David Pooley, Ph.D.](#) , Associate Professor

[Orrin Shindell, Ph.D.](#) , Assistant Professor

[Jennifer Steele, Ph.D.](#) , Professor

[Niescja E. Turner, Ph.D.](#) , Charles A. Zilker Professor of Physics and Astronomy

[Dennis Ugolini, Ph.D.](#) , Professor; Chair

## Requirements

- [Bachelor of Arts with a major in Physics](#)
- [Bachelor of Science with a major in Physics](#)
- [Teacher Certification in Physics](#)
- [Guidelines for Acceptance of Majors](#)
- [Honors in Physics](#)
- [Minor in Physics](#)
- [Minor in Astronomy](#)

## The Major

### Bachelor of Arts with a major in Physics

The requirements for the degree of Bachelor of Arts with a major in Physics are as follows:

#### **I. Departmental requirements:**

- A. The major: 30 credit hours in Physics, including the following or equivalent courses: PHYS 1111, 1112, 1311 (or 1309), 1312 (or 1310), 2131, 2132, 3321, 3322, 3323, 3335, 4121 or 4131, and at least two of the following five courses: 3325, 3333, 4122, 4132, 4395.
- B. Math requirements:
  - i. Math 1311, 1312, 2321
  - ii. Either MATH 3316 or both MATH 3336 and 3323.
- C. Computer Science Requirements: Either CSCI 1312 or CSCI 1320.

- D. Seminar Requirement: Four semesters of PHYS 2094. Students double majoring in either MATH or CSCI may substitute up to 2 semesters of MATH 2094 or CSCI 2094.
- E. Completion of Wagner Senior Assessment Exam in fall of the senior year.

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

The above are minimal requirements allowing students to supplement their programs with those courses best suited to fulfill their particular needs and to further their professional growth.

## Bachelor of Science with a major in Physics

The requirements for the degree of Bachelor of Science with a major in Physics are as follows:

### I. Departmental requirements:

- A. At least 35 credit hours in Physics, including the following or equivalent courses: PHYS 1111, 1112, 1311 (or 1309), 1312 (or 1310), 2131, 2132, 3321, 3322, 3323, 3325, 3333, 3335, 4121, 4122, 4131, 4132, 4395. (Honors students will take 3398, 4398, 4399 in place of 4395; these students are required to take 41 hours of Physics.)
- B. At least one course from the following: PHYS 3336, 4343, or 4346.
- C. Math requirements:
  - i. Math 1311, 1312, 2321, 3357
  - ii. Either MATH 3316 or both MATH 3336 and 3323.
- D. Computer Science Requirements: Either CSCI 1312 or CSCI 1320.
- E. Seminar Requirement: Four semesters of PHYS 2094. Students double majoring in either MATH or CSCI may substitute up to 2 semesters of MATH 2094 or CSCI 2094.
- F. Completion of Wagner Senior Assessment Exam in fall of the senior year.

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

The Bachelor of Science Program is designed to prepare students for graduate work in Physics. The above are minimal requirements allowing students to supplement their programs with those courses best suited to fulfill their particular needs and to further their professional growth.

# Teacher Certification in Physics

Students completing either the B.A. or B.S. physics major have two options to receive certification to teach physics in grades 8-12 in Texas through Trinity's Master of Arts in Teaching (MAT) program. Students can pursue (1) the Grades 8-12 Physics/Mathematics certification, which would enable a graduate to teach physics and mathematics or (2) the Grades 8-12 Physical Science certification, which would enable a graduate to teach physics as well as chemistry and 8th grade general science (this would require coursework in chemistry and geosciences in addition to the physics major). Both options require undergraduate education coursework as preparation for entry into the MAT program and to fulfill state requirements. Students who complete Trinity's 5 year Teacher Education Program will earn both a Bachelor's degree in Physics and Master of Arts in Teaching as well as teacher certification. For more information and specific requirements, including middle school and elementary science teaching opportunities as well, see the Education Department's program description in the course catalog.

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## Guidelines for Acceptance of Majors

Full acceptance in the major is granted if the following requirements are met at the time of application:

- I. Completion of PHYS 1111, 1112, 1311 (or 1309), 1312 (or 1310), 3323 with grades of C or better;
- II. Completion of MATH 1311, 1312 with grades of C or better; and
- III. A grade point average of at least 2.0 on all university work.

Provisional acceptance in the major is granted if it is apparent that the applicant can meet the requirements for full acceptance by the end of the semester in which the application is made.

Transfer students will be accepted provisionally pending completion at Trinity of at least one upper division course with a grade of C or better.

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## Honors in Physics

A student in Physics may work toward Honors in Physics under the Bachelor of Science Degree program. The requirement for Honors in Physics is the successful completion of the Bachelor of Science program except that an honors student will take PHYS 3398, 4398, 4399 in place of 4395 and will be required to take a total of 44 hours of physics. During the junior year, a student who is eligible for honors will, after consultation with the chair of the Physics and Astronomy Department, enroll in 3398; part of the requirement of this course will be to prepare a thesis proposal. In the second semester of the junior year, an honors student will present a thesis proposal and

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credentials to the department faculty. Upon approval of the proposal, a student may enroll in PHYS 4398, 4399 during the senior year. By the end of the senior year, the thesis must be presented and defended before the Physics and Astronomy Department faculty.

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## The Minor in Physics

A minor in Physics will consist of 18 credit hours of Physics. At least 9 credit hours must be at the upper division level. The minor will normally include the following or equivalent courses: PHYS 1111, 1112, 1311 (or 1309), 1312 (or 1310), 2094 (1 semester), 3323, plus seven additional hours of physics, six of which must be upper division.

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## The Minor in Astronomy

The minor in astronomy will consist of 19 credit hours. Of those, 13 hours will include:

PHYS 1304	Solar System Astronomy
PHYS 1305	Stellar and Extragalactic Astronomy
PHYS 1310 or 1312	General Physics II or Introduction to Electricity, Magnetism, and Waves
PHYS 1103	Observational Astronomy
PHYS 3350	Astrophysics

The remaining 6 upper-division hours are chosen from the following:

PHYS 3321	Statistical Physics and Thermodynamics
PHYS 3322	Classical Mechanics and Nonlinear Dynamics
PHYS 3323	Introduction to Modern Physics
PHYS 3325	Optical Physics
PHYS 3348	Atmospheric Physics
PHYS 3129	Research Participation II
PHYS 3-90	Directed Studies – Junior Level
PHYS 3-92	Directed Studies for Secondary School Science Teachers – Junior Level

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Students may also choose one relevant 3-hour-upper-division course approved by the department chair.

The combined total of hours for 3129, 3-90, or 3-92 may not exceed 3 hours. Any of these three research-directed studies courses may be repeated for additional credit with different content. The chair of the Department of Physics and Astronomy must approve the selected content of 3129, 3-90, or 3-92 as relevant to the minor in astronomy.

## Courses

### PHYS-1103 Observational Astronomy

A laboratory course to accompany either PHYS 1304 or 1305. Basic use of a telescope, including celestial coordinates and time systems. Visual observations of the Sun, Moon, planets and their satellites, stars, star clusters, nebulae, galaxies. Further possible topics include photometry, spectroscopy, electronic imaging. One field trip to a dark observing site may be required. May be taken only once for credit. Either PHYS 1304 or 1305 is a prerequisite or a corequisite.

### PHYS-1111 Introductory Physics Laboratory

Laboratory to accompany PHYS 1309 or 1311. Topics include: one-dimensional kinematics, elastic and frictional forces, Kepler's Laws, collisions, rotational motion, oscillatory motion. Corequisite: PHYS 1311 or 1309 must be taken concurrently.

### PHYS-1112 Intermediate Physics Laboratory

Laboratory to accompany PHYS 1310 and 1312. Topics include: DC, AC, and transient circuits, magnetism, geometric optics, interference and diffraction, blackbody radiation, spectroscopy, gamma ray absorption. Corequisite: PHYS 1310 or 1312 must be taken concurrently.

### PHYS-1194 Physics and Society Seminar

Discussion of the historical, sociological, philosophical implications and cultural context in which physics research is done and the implications of that research. Prerequisite: PHYS 3323.

### PHYS-1302 Frontiers of Physics

An introduction to the methods and results and philosophical implications of modern physics. Topics include: special and general relativity; the wave-particle theory of light and matter; atomic, nuclear and particle physics; future explorations.



## PHYS-1303 Energy and Earth's Changing Environment

An introduction to understanding energy production, consumption, and resource (e.g., fossil fuels, nuclear, solar, wind, water, geothermal, biofuels, and hydrogen). Topics for discussion include: environmental, political, economic, biological, and humanitarian consequences of energy production or use. Students will become more aware of the causes and consequences of climate change and of ways for mitigating the negative effects.

## PHYS-1304 Solar System Astronomy

A survey of the nature of the Solar System. Topics include: scale of the Solar System, major and minor planets; moons, asteroids, comets, and other solar system debris; gravity and orbital motion; the nature of light; lunar phases; lunar and solar eclipses; solar wind and planetary magnetospheres; seasons, planetary atmospheres, and comparative planetary climatology; evolution of planetary surfaces; extra-solar planets and the search for life elsewhere in the Galaxy. May be taken without enrolling in PHYS 1103. (Offered every Year).

## PHYS-1305 Stellar and Extragalactic Astronomy

A survey of the property of stars and of galaxies and modern theories of cosmology. Topics include: distances, masses, sizes, motions, magnitudes and spectra of stars; stellar structure and evolution; pulsars and black holes; star clusters, nebulae, interstellar gas and dust; galactic structure; quasars, active galaxies, clusters of galaxies, large-scale structure in the universe; extra-galactic distance scale, big bang theory, inflationary model, convergence of particle physics and cosmology; the nature of light and astronomical instruments. PHYS 1304 is not a prerequisite for PHYS 1305. May be taken without enrolling in PHYS 1103.

## PHYS-1307 Introduction to Nanotechnology

An introduction to current nanotechnology fabrication methods and applications aimed at nonscience majors. This course will explore how material properties change at the nanoscale and how these properties can be utilized in technological applications and consumer products. Topics include scientific concepts behind nanotechnology, microscopy at the nanoscale, medical applications, consumer applications, ethical concerns, and the environmental impact of nanotechnology.

## PHYS-1309 General Physics I

A calculus-level introduction to classical mechanics and its applications. Topics include: particle kinematics, Newton's laws of motion, kinetic and potential energy, work, linear and angular momentum, torque, statics, simple harmonic motion, mechanical waves, sound, fluids, thermal physics, and applications in biology, medicine, and geology. This course is appropriate for biology, chemistry, and geosciences majors. Only one of PHYS 1309 or 1311 may be taken for credit. Prerequisite: MATH 1311 or 1307 (either may be taken concurrently); Corequisite: PHYS 1111 must be taken concurrently

## PHYS-1310 General Physics II

A calculus-level introduction to electric fields, magnetic fields, light waves, and modern physics. Topics include: electric fields, electric current, electric circuits, magnetic fields, electromagnetic induction, electromagnetic waves, geometrical optics, physical optics, quantum physics, atomic physics, lasers, nuclear physics and applications in biology, medicine, and geology. This course is appropriate for biology, chemistry, and geosciences majors. Only one of PHYS 1310 or 1312 may be taken for credit. Prerequisite: PHYS 1309 or 1311; PHYS 1112 is normally taken concurrently but is not required.

### PHYS-1311 Introduction to Mechanics

A calculus-level introduction to classical mechanics. Topics include: particle kinematics, Newton's laws of motion, kinetic and potential energy, linear and angular momentum, torque, statics, simple harmonic motion, mechanical waves, and sound. This course is appropriate for physics and engineering science majors. Only one of PHYS 1309 or 1311 may be taken for credit. Prerequisite: MATH 1311 or 1307 (either may be taken concurrently). Corequisite: PHYS 1111 must be taken concurrently

### PHYS-1312 Introduction to Electricity, Magnetism And Waves

A calculus-level introduction to electric fields, magnetic fields, and light waves. Topics include: electric fields, Gauss's Law, electric potential, magnetism, Ampere's Law, electromagnetic induction, Lenz's Law, Maxwell's Equations, geometrical and physical optics. This course is appropriate for physics and engineering science majors. Only one of PHYS 1310 or 1312 may be taken for credit. Prerequisites: PHYS 1311 (or 1309) and MATH 1312 (may be taken concurrently). Corequisite: PHYS 1112 must be taken concurrently

### PHYS-2-90 Directed Studies - Sophomore Level

Individual research under faculty supervision or independent study under faculty supervision in fields not covered by other courses. Credit may vary from 1 to 3 hours. This course may be repeated for additional credit; however, no more than 3 total hours may be counted toward a major in physics. Prerequisite: Consent of the Department Chair.

### PHYS-2094 Physics Seminar

Attendance at departmental seminars. Grade is based on attendance.

### PHYS-2128 Research Participation I

Individual research participation under faculty supervision. Prerequisite: Consent of the Department Chair.

### PHYS-2131 Sophomore Experimental Physics I

Rigorous experimental work, including data handling and scientific writing. Experiments are drawn from the areas of mechanics, electricity and magnetism, optics, and nuclear physics. Meets 3 hours per week. Prerequisites: PHYS 1111, 1112, 1312 (or 1310).

## PHYS-2132 Sophomore Experimental Physics II

Continued instruction in experimentation, data analysis and scientific writing. Experiments are drawn from the areas of mechanics, electricity and magnetism, optics, and nuclear physics. Meet 3 hours per week. Prerequisites: PHYS 2131.

## PHYS-2311 An Introduction to Biophysics

A basic introduction to the application of physical principles to biological systems on nanometer-to-micrometer length scales. Questions addressed include: What are the forces that hold a cell together? How can a cell exert forces resulting in cell motion? What are the forces and energies involved in DNA functioning, protein folding, and nerve-signal transmission? How do the forces and energies at the molecular level ultimately generate the forces and energies required for macroscopic motion? Prerequisites: Math 1307 or 1311 and any one of the following four courses: BIOL 1311, CHEM 1318, PHYS 1309, or PHYS 1311.

## PHYS-3129 Research Participation II

Individual research participation under faculty supervision. Prerequisites: PHYS 2128 and consent of the Department Chair.

## PHYS-3-92 Directed Studies for Secondary School Science Teachers - Junior Level

Students work under supervision of a faculty member on a project that will be applicable to their future careers in teaching secondary school science. Oral and written communication of results are required. May be taken for 1 to 2 hours per semester with no more than 4 cumulative credit hours possible. Prerequisites: Junior standing and completion of at least six science and mathematics courses and consent of the instructor.

## PHYS-3194 Speaking Physics

Speaking Physics is a junior level course designed to train physics majors to become effective communicators in their field. Students will gain experience presenting technical research-style talks, with several opportunities for feedback from the instructor and peers. (Offered every Spring)

## PHYS-3321 Statistical Physics and Thermodynamics

An introduction to the subjects of statistical mechanics, kinetic theory, thermodynamics and heat. Prerequisites: PHYS 3323 and MATH 2321 (may be taken concurrently).

## PHYS-3322 Classical Mechanics and Nonlinear Dynamics

Newtonian dynamics and kinematics utilizing the vector calculus. Topics include momentum, work and potential energy, angular momentum, rigid body dynamics, harmonic oscillators, central force motion, non-inertial systems,

chaotic kinematics, and non-linear systems. Prerequisites: PHYS 1312 (or 1310), MATH 2321 (may be taken concurrently).

### PHYS-3323 Introduction to Modern Physics

A quantitative survey of modern physics. Topics include: special relativity, waveparticle duality, and Schrodinger equation, identical particles, solid state, and high energy physics. Prerequisites: PHYS 1312 (or 1310), MATH 2321 (may be taken concurrently).

### PHYS-3325 Optical Physics

The nature and propagation of electromagnetic waves and their interaction with matter. Topics from geometrical optics include reflection, refraction, mirrors and lenses. Topics from physical optics include polarization, interference, and Fraunhofer and Fresnel diffraction. Prerequisites: PHYS 1312 (or 1310) and MATH 1312.

### PHYS-3333 Quantum Physics I

Introduction to the theory of quantum mechanics. Stationary states and time evolution of solutions to the Schrodinger equation. Observables, operators and eigenvalues. The harmonic oscillator, angular momentum, central potentials, and perturbation theory. Prerequisites: MATH 2321, PHYS 3323.

### PHYS-3335 Electromagnetic Fields

An intermediate course on electromagnetic theory. Electrostatic field and potential, Gauss's law, conductors, electric dipole and multipoles, solutions to Laplace's equation, method of images, dielectric media, electrostatic energy, electric current. Magnetic field of steady currents, including the law of Biot and Savart, Ampere's law, magnetic vector potential. Electromagnetic induction. Introduction to Maxwell's equations. Prerequisites: PHYS 3322, MATH 3316 (may be taken concurrently).

### PHYS-3336 Advanced Theoretical Physics

An advanced course on electromagnetic theory and classical mechanics. Magnetic materials, inductance, magnetic energy, transient and steady-state behavior in circuits with time variable currents, full development of Maxwell's equations, propagation of electromagnetic waves, waves in bounded regions, radiation emission. Lagrangian and Hamiltonian dynamics, rigid body motion. Further possible topics include special relativity, plasma physics, fluid mechanics, and coupled oscillations. Prerequisites: PHYS 3335, MATH 3316.

### PHYS-3348 Atmospheric Physics

The physics of planetary atmospheres and the role of the atmosphere in determining climate. Topics include: global radiative equilibrium, radiative transfer, thermodynamic processes in the atmosphere, the general circulation, cloud formation, the ozone layer, instrumentation and data bases. Prerequisite: PHYS 1310 or 1312.

## PHYS-3350 Astrophysics

The application of physics to understanding stars and systems of stars. Topics include: cosmic distance scale, gravitational dynamics, statistical mechanics, electromagnetic processes, quantum effects, stars, cosmic gas and dust, quasars, cosmology. Prerequisite: PHYS 1310 or 1312; PHYS 1304 or 1305 or permission of the instructor

## PHYS-3-90 Directed Studies - Junior Level

Individual research under faculty supervision or independent study under faculty supervision in fields not covered by other courses. Credit may vary from 1 to 3 hours. This course may be repeated for additional credit; however, no more than three hours may be counted toward a major in physics. Prerequisite: Consent of the Department Chair.

## PHYS-3398 Honors Reading

Individual research and study under faculty supervision in preparation for Honors Thesis work. Prerequisite: Consent of the Department Chair.

## PHYS-3412 Applied Geophysics

An introduction to the use of physical principles and measurements in the study of the Earth's subsurface, with an emphasis on applications in environmental science, engineering, mineral exploration and archeology. Topics include Fourier analysis, seismic waves in elastic media, refraction tomography, reflection seismology, multichannel analysis of surface waves, gravity, electrical resistivity and groundpenetrating radar. (Same as GEOS 3412) Three class hours and three laboratory hours per week. Field trips are required; field trip expenses must be paid by each student. Prerequisite: PHYS 1310 or 1312 (may be taken concurrently).

## PHYS-4121 Photonics and Electronics Laboratory I

An introduction to the use of lasers, fiber optics, and semiconductor-based electronics in modern technology and physics research. Laboratory projects include digital and analog integrated circuits, electronic and optical-based signal processing and communication devices. Meets 3 hours per week. Prerequisites: PHYS 2132, 3323 (May be taken concurrently), or consent of instructor.

## PHYS-4122 Photonics and Electronics Lab II

Continued hands-on instruction in the use of lasers, fiber optics and semiconductor-based electronics in modern technology and physics research. Laboratory projects include fiber-optic sensors and Michelson interferometry. Meets 3 hours per week. Prerequisites: PHYS 4121.

## PHYS-4131 Advanced Experimental Physics I

Experimental methods of modern physics. Topics include: atomic physics, radioactivity, interference, diffraction

and electronics. Prerequisite: PHYS 2132, 3323 (may be taken concurrently), or consent of instructor.

## PHYS-4132 Advanced Experimental Physics II

Advanced experimental techniques in modern physics. Rigorous analysis of experimental data and competent scientific writing form an integral part of the course. Topics include: atomic physics, advanced optics, laser physics, transport phenomena, and reduced temperature measurements. Prerequisite: PHYS 4131.

## PHYS-4191 Nanofabrication

This course is an introduction to nanometer scale aspects of chemistry, physics, and biology, and how these can be combined to fabricate architectures with dimensions in the nanometer scale. Principles of fabrication techniques that underpin this field will be presented with recent developments as case studies, including nanoparticles, self-assembled monolayers (SAMs), electromaterials, and other new materials. An extensive series of hands-on laboratory activities is a central part of the course. Students will fabricate and characterize nanoscale structures using a variety of techniques from biology, chemistry, physics, and materials science. In the first few weeks of the semester, we will focus on principles, concepts, and instrumentation utilized in nonfabrication. During the rest of the semester, students will choose a current paper from the literature and attempt to recreate the fabrication process and all characterization techniques. (Offered occasionally). Prerequisite: Permission of Instructor

## PHYS-4328 High-Frequency Electromagnetics

The fundamental theory of electromagnetic waves is developed and applied to the design of high-frequency electrical circuits. Topics include: how electromagnetic waves travel and are usefully directed; how to design signal transmission lines, filters and couplers; analysis of high-frequency circuit networks, and high-frequency circuit concepts such as distributed impedance. Students will also prepare an individually researched assignment on a subject of their choice exploring an emerging technology in the electrical engineering area. (Also listed as ENGR 4328) Prerequisite: Math 2321 and either ENGR 2320 or PHYS 2131.

## PHYS-4343 Quantum Physics II

A formal treatment of quantum mechanics emphasizing Dirac notation and matrix methods. Topics include: three dimensional systems, angular momentum, multiparticle systems, identical particles, spin perturbation theory, scattering, and an introduction to high-energy and particle physics. Prerequisites: PHYS 3333, 3335.

## PHYS-4346 Condensed Matter Physics

An advanced treatment of quantum theories of atoms and solids. Physics of solids and solutions, reciprocal lattices and crystallography, thermodynamic properties of condensed systems. Properties of atoms and photon. Laser cooling, coherent excitation, and atom optics. Prerequisite: PHYS 3333.

## PHYS-4-90 Directed Studies - Senior Level

Individual research under faculty supervision or independent study under faculty supervision in fields not covered by other courses. Credit may vary from 1 to 3 hours. This course may be repeated for additional credit; however, no more than 3 total hours may be counted toward a major in physics. Prerequisite: Consent of the Department Chair.

## PHYS-4395 Senior Project

Individual research and scholarly investigation under faculty supervision. Presentation of results at a department seminar is required. Required of all B.S. Physics majors. Prerequisite: Senior standing.

## PHYS-4396 Senior Thesis

Continuation of PHYS 4395 including written preparation of a thesis and oral presentation of results at a department seminar. Not required of but highly recommended for B.S. Physics majors. Prerequisite: PHYS 4395.

## PHYS-4398 Honors Project

Individual research and scholarly investigation under faculty supervision. Presentation of results at a department seminar is required. Required for honors in physics. Prerequisite: PHYS 3398.

## PHYS-4399 Honors Thesis

Continuation of PHYS 4398 including written preparation of a thesis and oral presentation of results at a department seminar. Required for honors in physics. Prerequisite: PHYS 4398.

# Political Science

## Faculty

[Rosa Aloisi, Ph.D.](#) , Assistant Professor

[David A. Crockett, Ph.D.](#) , Professor; Chair

[John R. Hermann, Ph.D.](#) , Associate Professor

[Katsuo A. Nishikawa, Ph.D.](#) , Associate Professor; Director of the Center for International Engagement

[Peter O'Brien, Ph.D.](#) , Professor

[Sussan Siavoshi, Ph.D.](#) , Una Chapman Cox Distinguished Professor of International Affairs

[Hyon Joo Yoo, Ph.D.](#) , Associate Professor

## Requirements

- [The Major](#)
- [Guidelines for Acceptance of Majors](#)
- [The Minor](#)
- [Internships](#)

## The Major

The requirements for the degree of Bachelor of Arts with a major in Political Science are as follows:

### **I. Departmental requirements:**

- A. 34 credit hours in political science, at least 21 of which must be upper-division
- B. 9 credit hours in core courses (PLSI 1301, 1331, 1342)
- C. At least one course in political theory

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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## Guidelines for acceptance of majors

- I. Completion of two lower division courses with grades of C or better.
- II. An overall grade point average of at least 2.0.



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## The Minor

The requirements for the Minor:

A minimum of 18 credit hours of political science. Six hours shall be lower division; the remaining 12 shall be upper division.

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## Internships

The department encourages majors and minors to actively pursue internship opportunities that are available locally or through a variety of study abroad or Washington, DC programs, with or without credit. PLSI 3-97 Internship in Politics, Administration, and Law can only be taken Pass/Fail.

## Courses

### Lower Division

#### PLSI-1301 American Politics

A study of the institutions, processes, and behavior of American government, with an emphasis on how enduring constitutional features impact contemporary concerns. This is the basic introductory course in American government. (Offered every semester)

#### PLSI-1331 Global Politics

A comparative study of different political systems around the globe and the major issues faced by governments as they manage the economy, immigration, climate change, and other issues. This is the basic introductory course in comparative politics. (Offered every year)

#### PLSI-1342 International Politics

An introduction to the interaction among state and non-state actors in the international arena. This course reviews international theory and examines important historical and contemporary issues in international relations. Topics include international security, war, globalization, terrorism, and the proliferation of weapons of mass destruction. This is the basic introductory course in international relations. (Offered every semester)

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## PLSI-1361 Politics & Morality

An introduction to some of the most important moral issues persons confront as citizens of a given polity. For example, when should one (dis)obey a law? Is the community's interest greater than the individual's? Students read selected prominent thinkers who have taken positions on such questions and then formulate their own positions in the context of their own situation. (Offered every year)

## PLSI-2432 Film, Literature, and Politics of the Third World

An examination of challenges facing Third World societies through literature and film. Relying primarily on the works of Third World artists and writers, the course will explore issues such as poverty, the plight of ethnic minorities, the status of women, and the legacy of colonialism. (Offered every year)

## Upper Division - American Politics

### PLSI-3301 Political Parties and Interest Groups

An analysis of the development, structure, functions, and activities of political parties and interest groups in the American political system. In addition to an analysis of the interaction of these institutions, attention is given to the role of parties and interest groups in organizing mass political behavior in the electoral and policy making processes.

### PLSI-3303 Elections and Campaigns

A study of the recruitment, nomination, and election of public officials in the United States with an emphasis on election theory, the legal framework of elections, campaign strategy and tactics, voting behavior, political advertising, and campaign finance.

### PLSI-3304 Political Communication

Studies communication aspects of the political processes in a democratic society with an emphasis on contemporary political campaigns; presidential and congressional rhetoric; and less public forms of communication in the policy-making process. (Also listed as HCOM 4350.)

### PLSI-3306 The American Presidency

An examination of the Presidency in the constitutional order, including recruitment, powers, and responsibilities and its relationship to the other major agencies of the state.

### PLSI-3329 Special Topics in American Politics

Occasionally courses will be offered on special topics. Students are encouraged to bring to the attention of the Department Chair topics they wish to have offered. Students may take this course more than once provided the topics vary.

### PLSI-3405 The U.S. Congress

An analysis of the U.S. Congress, with an emphasis on its historical roots and constitutional foundations, the legislative process and policy outcomes, the development of institutional structures and organizations, and the role of political parties, interest groups, and legislative behavior. (Offered every Spring)

### PLSI-3413 Policy Analysis and the Policymaking Process

An examination of public policy from an interdisciplinary perspective. Students study public policies from a historical, theoretical, institutional, political, and social perspective; they study how "problems" are identified and which problems government responds to and why; and they learn how to examine the role of race, ethnicity, gender, social class, and other differences when policies are analyzed, created, and implemented. (Offered every Fall)

### PLSI-3416 Urban Politics

An exploration of the urban space, including the politics, institutions, power centers, policies, and the people who live in urban environments. Emphasis is given to why cities matter, how cities are organized, how cities operate as an economic engine, and how cities shape identity and experiences while producing inequality. Contemporary urban issues are considered, such as demographic changes, community power, and public transportation. (Offered every Spring) (Also listed as URBS 3416)

## Upper Division - Comparative Politics

### PLSI-3333 Latin American Politics

A comparative survey of government and politics in Latin America, focusing on illiberal democracies, political participation, and clientelism in the region.

### PLSI-3334 State, Society, and Change in the Middle East

A comparison of the political systems of major Middle Eastern countries, emphasizing the socio-economic and cultural characteristics of selected cases. Prerequisite: Junior standing or consent of instructor.

### PLSI-3339 Special Topics in Comparative Politics

Occasionally courses will be offered on special topics. Students are encouraged to bring to the attention of the Department Chair topics they wish to have offered. Students may take this course more than once provided the topics vary.

### PLSI-3430 European Politics

A study of the successes and failures, strengths, and weaknesses of parliamentary democracy in various European countries. (Also listed as GRST 3470). (Offered every other year)

### PLSI-3431 Comparative Political Economy of North America, Europe, and East Asia

A comparative study of the relationship between the public and private sectors in North America, Europe, and East Asia, with special emphasis on the extent to which government intervenes in the economy. (Also listed as GRST 3471). (Offered every other year.)

### PLSI-3435 Global City Berlin

An examination of the political tensions surrounding increased immigration to and diversity in Berlin and Germany during the past and the present. (Offered every other year)

## Upper Division - International Politics

### PLSI-3344 The Middle East and the World

An examination of international relations in the Middle East with an emphasis on domestic, regional, and global factors in shaping the foreign policies of major countries of the region. Prerequisite: Junior standing or consent of instructor.

### PLSI-3345 US Foreign Policy

An examination of US foreign policy and actions in a globalizing world. Prerequisite: PLSI 1342 or consent of instructor.

### PLSI-3349 Special Topics in International Politics

Occasionally courses will be offered on special topics. Students are encouraged to bring to the attention of the Department Chair topics they wish to have offered. Students may take this course more than once provided the topics vary.

### PLSI-3441 East Asian Security

An examination of core debates and arguments with respect to international security in East Asia. Topics include important cases in past and current dynamics in East Asia, such as Chinese hierarchy, Japan's political role in Asia, the Korean Peninsula, growing interactions in Southeast Asia, and U.S foreign policy in East Asia. (Offered every other year)

### PLSI-3442 International Law

An introductory survey of public international law as practiced by states and international organizations, with an emphasis on philosophical and theoretical perspectives, and on different subfields of international law such as international criminal law, law of the sea, human rights, economy, and international humanitarian law. (Offered every Fall)

### PLSI-3443 Chinese Foreign Policy

An examination of Chinese foreign policy by focusing on leadership, economic conditions, political settings, public opinion, and China's relations with other countries. Includes a brief exploration of the historical role of China in international politics. Taught in English. (Also listed as CHIN 3343)

### PLSI-3446 War and Alliance

A study of theoretical and empirical studies on the nature of international conflicts and alliance. Topics include the causes of war, crisis management, escalation of conflicts, termination of war, and the role of alliances in war and peace. (Offered every other year) Prerequisite: One lower division course in Political Science or consent of instructor.

### PLSI-3447 International Criminal Justice: the Hague Program

An analysis of the birth and development of International Criminal Justice and the international crimes leading to the creation of International Criminal Tribunals. (Offered every other year)

### PLSI-3448 International Human Rights

An examination of the historical, legal, and political evolution of international human rights law. Topics include the history of human rights violations, the legal development of the major human rights instruments, and the work of human rights activists. (Offered every other year)

### PLSI-4341 International Political Economy

An examination of the relationship between international politics and international economy. Particular attention is given to the explanation of political decisions based on economic determinants. Emphasis will be given to concepts of power, interdependence, poverty, imperialism, justice, and development.

## Upper Division - Public Law

### PLSI-3351 Constitutional Law

A study of the U.S. Supreme Court's role in defining the nature and scope of national judicial, executive, and legislative authority. Additional topics include federalism, commerce power, and economic substantive due process. Emphasis on the development of basic legal research skills.

### PLSI-3352 Civil Rights and Liberties

A study of the U.S. Supreme Court's role in defining the meaning of the Bill of Rights, selective incorporation, privacy doctrine, and the Fourteenth Amendment's Due Process and Equal Protection Clauses. Emphasis on the development of basic legal research skills.

### PLSI-3354 Judicial Process

An examination of the functions and roles of courts in the American political and legal system. Topics include legal education/profession, group litigation strategies, methods of judicial selection, theories of judicial decision-making, and judicial philosophy.

### PLSI-3359 Special Topics in Public Law

Occasionally courses will be offered on special topics. Students are encouraged to bring to the attention of the Department Chair topics they wish to have offered. Students may take this course more than once provided the topics vary.

## Upper Division - Political Theory

### PLSI-3361 Classical Political Thought

An examination of the nature of politics, justice, and civic virtue in ancient Greek, Roman, Christian, and Renaissance thought. Plato, Aristotle, Augustine, Aquinas, and Machiavelli.

### PLSI-3369 Special Topics in Political Theory

Occasionally courses will be offered on special topics. Student are encouraged to bring to the attention of the Department Chair topics they wish to have offered. Students may take this course more than once provided the topics vary.

## PLSI-3462 Modern Political Thought

An examination of freedom, authority, and democracy through the writings of the great political thinkers of the modern age. Hobbes, Locke, Rousseau, Marx, Mill, and de Tocqueville, and feminist thinkers such as Mary Wollstonecraft and Simone de Beauvoir. Prerequisite: Junior standing or consent of instructor.

## PLSI-3463 Masters of Suspicion: Contemporary Political Thought

A study of many of the sharpest contemporary thinkers who have been opposed to democracy or pessimistic about its prospects. This course examines some of these thinkers and then takes up the work of other prominent contemporaries who have sought to defend democracy. (Also listed as GRST 3472) (Offered every other year)

## Upper Division - Special Courses

### PLSI-3315 Iceland - Its Unique Geological, Economic and Cultural History

This course will expose students to the unique economic, geologic, and cultural history of Iceland. The economic aspects will focus on the role of financial markets and monetary institutions in economic booms and crashes using Iceland as a case study, possible solutions to public good problems such as the Icelandic fishing quota, business practices which often prioritize protection of the environment and social responsibility, and the role of international trade in development of a small country. The geological history will emphasize Iceland's plate tectonic setting, volcanism, glacial history and related hazards, geothermal energy, and the effects of climate change. The cultural portion will explore the fundamental role of literature in a country with virtually no illiteracy, and the role of the sagas in the transmission of culture, language, and the law in the country with the oldest parliament in the world. (Offered every other year).

### PLSI-3366 Governance and Public Policy in Contemporary China

This course covers most significant issues of contemporary policies and public policy in China. It explores the forces changing the lives of nearly a fifth of humanity, the 1.1 billion people of China. This course is designed to be experimental in both subject and teaching methodology. In order to explore the political, economic, and social processes of liberalization that have created this new era of the increased circulation of people, ideas, commodities and technologies across national boundaries, seminar participants must use materials and methods from many scholarly disciplines and traditions: urban studies, political science, sociology, history, anthropology, economics, and media/cultural studies. In order to study these increasingly mobile populations that often fall outside the boundaries of conventional area studies approaches, students must develop innovative comparative case study and survey methodologies. (Also listed as CHIN 3366, URBS 3366)

### PLSI-3372 Research Methods in Political Science

An introduction to quantitative political science with emphasis on epistemology, falsifiability, research design, and

statistical analysis. Students will produce an original empirical research paper by the end of the semester.  
Prerequisite: One lower division course in Political Science or consent of instructor

### PLSI-3-90 Reading and Conference

Individual work under supervision. Varies in credit from one to six credit hours. Prerequisites: Junior standing with 6 hours upper division credit and consent of instructor.

### PLSI-3-91 Special Topics in Political Science

Occasionally courses will be offered on special topics. Students are encouraged to bring to the attention of the Department Chair topics they wish to have offered. Students may take this course more than once provided the topics vary.

### PLSI-3-97 Internship in Politics, Administration, and Law

Students enrolled in PLSI 3-97 will be assigned to various party, governmental, or law offices on the basis of individual preferences and the availability of the assignments. The nature of the student's responsibilities will vary with the assignment involved and subject to the approval of the supervising faculty. Must be taken Pass/Fail. Permission of instructor required.



# Psychology

## Faculty

[Carolyn Becker, Ph.D.](#) , Professor

[Jane Childers, Ph.D.](#) , Professor; Chair

[William Ellison, Ph.D.](#) , Assistant Professor

[Paula Hertel, Ph.D.](#) , Professor

[Kah-Chung Leong, Ph.D.](#) , Assistant Professor

[Kevin McIntyre, Ph.D.](#) , Associate Professor

[Kimberley Phillips, Ph.D.](#) , Professor

[Harry Wallace, Ph.D.](#) , Associate Professor

[Charles White, Ph.D.](#) , Professor

[Carol Yoder, Ph.D.](#) , Professor

## Overview

The curriculum in psychology reflects both the diversity of its subdisciplines and the universality of their reliance on methodological sophistication. All students who major in psychology are required to take courses that represent the main topical areas within the psychological sciences, plus a year-long methods sequence (preferably in the sophomore year). Through a rigorous advising program, students are encouraged to choose electives to develop their particular interests. Students who intend graduate study are encouraged to choose research experiences, as well as seminars related to their interests.

## Requirements

### The Major

The requirements for the degree of Bachelor of Arts with a major in psychology are as follows:

**I. Departmental requirements: 38 hours in psychology, including:**

- A. PSYC 1300
- B. PSYC 2401 and PSYC 2402
- C. PSYC 2310 (alternatives: BIOL 1311, BIOL 1307)
- D. One course in each of the following clusters:
  - 1. Developmental Psychology: 2320, 3321, 3322

2. Social and Clinical Psychology: 2341, 3340, 3342
  3. Cognition, Perception, and Learning: 2312, 2330, 3311, 3431
- E. At least 18 credit hours must be at the upper-division level.
- F. Electives sufficient to total 38 hours in psychology (other cluster courses, companion courses, and individual experiences). Students must complete at least 2 additional upper-division courses from cluster courses or companion courses as part of these elective hours.

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

Majors are encouraged to take courses from other disciplines that can serve to broaden their understanding of specific areas within psychology (e.g., mathematics, biology, computer science, and anthropology/sociology).

## The Minor

A minor in psychology may be obtained by successful completion of at least 18 credit hours. At least nine of these hours must be at the upper-division level.

## Guidelines for Acceptance of Majors

Full acceptance in the major is granted if the following requirements are met at the time of application:

- I. Completion of PSYC 1300 with a grade of C or better;
- II. Completion of PSYC 2401 with a grade of C or better;
- III. A grade point average of at least 2.0 on all university work.

Provisional acceptance in the major is granted if it is apparent that the applicant can meet the requirements for full acceptance by their senior year. Transfer students will be accepted provisionally pending completion at Trinity of at least one upper-division Psychology course with a grade of C or better.

## Courses

### Introduction, Methods, and Physiological Processes

#### PSYC-1300 Principles of Psychology

An introduction to the major domains of psychological knowledge, informed by biological, cognitive, environmental and motivation perspectives. Emphasizes scientific theory and methods supplemented by applications to everyday

experience.

## PSYC-2401 Statistics and Methods I

Instruction in measurement processes, descriptive statistics, correlation and inferential reasoning and basic statistical procedures. Students become acquainted with major procedures and issues involved in the framing of psychological research. Instruction includes the use of computer-implemented statistical packages and the method and style of writing about psychological research. Prerequisite: PSYC 1300 or BIOL 1311

## PSYC-2402 Statistics and Methods II

Instruction in additional techniques in inferential reasoning, including analysis of variance, and major nonparametric statistics. All topics are presented within the context of research design and methodology. Related statistical packages for computer-assisted analysis and further instruction in writing are included. Prerequisite: PSYC 2401 or consent of instructor.

## PSYC-2310 Introduction to Neuroscience

A survey of basic neuroscience, starting with fundamentals of neuronal structures and ending with higher brain functions and their relations to mind and behavior. (Also listed as NEUR 2310.) Prerequisite: PSYC 1300

## PSYC-2110 Neuroscience Laboratory

The neuroscience laboratory provides students with a hands-on approach to understanding the scientific method through neuroscientific technique and data analysis, including anatomical, electrophysiological and computer simulations. Students will engage in laboratory exercises as well as in solving problem sets. This course is appropriate for both non-science majors and science majors. Spring semester only. (Also listed as NEUR 2110) Prerequisite or Corequisite: PSYC/NEUR-2310.

# Cluster 1: Developmental Psychology

## PSYC-2320 Lifespan Development

Overview of contemporary theoretical and empirical approaches to lifespan development. Biological, social, and psychological dimensions of behavior will be examined from conception and infancy through late life.

## PSYC-3321 Cognitive Development

Examination of contemporary theoretical and empirical approaches to cognitive development from birth to adolescence. Major areas of cognition (e.g. perception, categorization, memory, language) are studied from a

developmental perspective. Prerequisites: PSYC 1300

### PSYC-3322 Social Development

Investigation of social development from infancy through adolescence. The course focuses on topics including infant attachment, gender development, the understanding of race/ethnicity, the development of morality, and the influence of peers, parents and the media on social development. Prerequisite: PSYC 1300.

## Cluster 2: Social and Clinical Psychology

### PSYC-2341 Social Psychology

Examination of how individuals think, feel, and behave in different social contexts. Explores the basic and applied research on topics such as aggression, attitudes, attribution, prejudice, relationships, self-perception, and social influence. Prerequisite: PSYC 1300.

### PSYC-3340 Psychopathology

Examination of current theory and research findings concerning major psychological disorders. Causes, treatment, and phenomenology of psychopathology are explored, with emphasis on relevant social, intrapsychic, and physiological factors. Includes a critique of approaches to differentiating pathological and adaptive behavior. Prerequisite: PSYC 1300.

### PSYC-3342 Personality and Individual Differences

Examination of the following perspectives on personality process: psychoanalytic, trait, genetic, behavioral, cognitive, and humanistic. Major research methods and issues of each perspective are stressed. Prerequisites: PSYC 1300 and 2401.

## Cluster 3: Cognition, Perception, and Learning

### PSYC-2312 Principles of Learning

Major principles of learning, derived from empirical research with a variety of organisms. Historically important and contemporary theories of learning are introduced. Topics also include application to child rearing, education, and psychotherapy and implications for issues concerning freedom and responsibility. Prerequisites: PSYC 1300

### PSYC-2330 Fundamentals of Cognition

An introduction to the principles of cognitive psychology. Topics include the development of the cognitive paradigm, attention, higher order processes in perception, language, memory, problem-solving and human-computer interaction. Application to other domains in Psychology and disciplines will be discussed. Prerequisite: PSYC 1300

### PSYC-3311 Sensation and Perception

Study of sensory and perceptual systems. Emphasis is on the relationship of neurophysiological and cognitive principles. Major focus is on vision (visual neurophysiology, spatial vision, form, color, depth and motion) with some discussion of psychophysical methods, audition, speech perception and the chemical senses. Demonstrations and conducting experiments are part of the course. Prerequisite: PSYC 1300, 2401.

### PSYC-3431 Memory and Cognition

Examination of the fundamental principles of memory and thought, the experimental evidence to support these principles, and the theoretical perspectives used to understand them. (Offered every other year.) Prerequisite: PSYC 2402 or consent of instructor.

## Companion Courses

### PSYC-3310 Neuroethics

In this course students review and discuss ethical theories and principles, and then discuss ethical dilemmas arising from several currently debated topics relevant to the brain, cognition, and behavior. Relevant bioethical and philosophical principles will be applied to each issue allowing students to acquire and develop skills in ethical analysis. In addition, relevant neuroanatomy, neurophysiology, and neurotechnologies will be discussed. (Also listed as NEUR 3310.) (Offered every other year.) Prerequisite: PSYC 1300 and PSYC/NEUR 2310 or Permission of Instructor

### PSYC-3451 Clinical Psychology

Exploration of the field of clinical psychology, with a focus on theories and practices of intervention. The major approaches to intervention, including psychodynamic, behavioral, cognitive, humanistic, and systems, are examined. These approaches are critically evaluated with attention to relevant research issues. Prerequisites: PSYC 1300, 3340.

### PSYC-3355 Behavioral Medicine

Examination of the basic psychological processes that influence health and illness. Specific behaviors, illnesses, and physical conditions such as smoking, obesity, cancer, HIV, and hypertension are explored with a focus on

theoretical models and psychological interventions. Prerequisites: PSYC 1300

### PSYC-3360 Special Topics in Psychology

In depth study of theory and research within a particular domain of psychology. May be repeated on different topics. Prerequisite: Consent of instructor.

### PSYC-3368 Supervised Research

Independent research using empirical methods. Nine hours per week will be distributed across research activities, colloquia attendance and student presentations. May be repeated twice with consent of instructor. (Offered every semester.) Prerequisites: Consent of instructor, PSYC 2-61, and PSYC 2401.

### PSYC-4390 Senior Seminar in Psychology

In-depth study of theory and research on a topic that spans subdisciplines within psychology or relates psychology to cross-disciplinary interests. Prerequisite: Senior status with a major in psychology or consent of instructor.

## Individual Experience

### PSYC-2-61 Lab Experience in Psychology

This course is designed to give students the background experiences needed to conduct research in Psychology. Students will engage in research-related activities such as reading empirical papers, data collection, data coding, and learning research protocols. This course will be offered on a Pass/Fail basis. (Offered every semester.) Prerequisite: Consent of instructor and PSYC 1300.

### PSYC-3357 Directed Field Practicum

Field work conducted as part of the academic curriculum. May be repeated once for credit on a different topic. Pass/Fail basis only (Does not count toward the major). Prerequisites: PSYC 3340 and consent of instructor

### PSYC-3-61 Advanced Research in Psychology

This course is designed to allow students to develop advanced research skills (e.g., data analysis, manuscript preparation), as well as provide students with the opportunity to complete ongoing research projects. For each credit hour, three hours per week will be distributed across research experiences. (Offered every semester.) Prerequisites: PSYC 3368, and consent of instructor.

### PSYC-4395 Thesis I

Independent research and scholarly investigation conducted with faculty supervision and culminating (with PSYC 4396) in the preparation of a written thesis. Prerequisites: PSYC 2401, 2402, and consent of instructor.

## PSYC-4396 Thesis II

Completion of research initiated in PSYC 4395 and the presentation of the written thesis according to departmental guidelines. Prerequisites: PSYC 4395; consent of instructor.

# Religion

## Faculty

Kimberly Bauser McBrien , Visiting Assistant Professor

Gregory Clines , Visiting Assistant Professor

[Ruben R. Dupertuis, Ph.D.](#) , Associate Professor; Chair

Sajida Jalalzai, Ph.D. , Assistant Professor

[Randall L. Nadeau, Ph.D.](#) , Professor

[Sarah K. Pinnock, Ph.D.](#) , Jennie Farris Railey King Professor of Religion

[Chad S. Spigel, Ph.D.](#) , Associate Professor

[Angela Tarango, Ph.D.](#) , Associate Professor

## Requirements

## The Major

The requirements for the degree of Bachelor of Arts with a major in Religion are as follows:

### I. Departmental requirements:

A. 32 credit hours in Religion including at least one course from each of the following two groups:

1. RELI 1320, RELI 1330, or RELI 1360
2. RELI 2354, RELI 2355, or RELI 2356

B. RELI 2400: What is Religion?

C. At least 16 of the credit hours in Religion to be upper-division courses selected in consultation with a faculty adviser in the Department of Religion.

D. RELI 4494: Approaches to the Study of Religion.

E. A total of no more than 16 credit hours from RELI 3-90 and 3-91 may be counted toward the major without approval of the adviser and the Department.

**II. University requirements:** completion of all other required elements of the Pathways Curriculum and at least 124 credit hours.



# The Minor

The requirements for a minor in Religion are as follows:

- I. At least 18 credit hours in Religion.
- II. At least 12 of the credit hours in Religion to be upper-division courses selected in consultation with a faculty adviser in the Department of Religion.
- III. A total of no more than 8 credit hours from RELI 3-90 and 3-91 may be counted toward the minor without approval of the adviser and the Department.

## Courses

### Lower Division Courses at the 1000 Level

#### RELI-1320 Ethical Issues in Religious Perspective

Inquiry into the religious dimension of issues such as environmental pollution, violence, capital punishment, economic injustice, hunger, homosexuality, feminism, pornography, abortion, and euthanasia.

#### RELI-1330 Asian Religions

A study of Hindu, Buddhist, and East Asian religious traditions in theory and practice; attention to such topics as reincarnation, yoga and meditation, shamanism, ritual, salvation, personal religious experience, gender roles, spiritual ideals of art, and the relation of humankind to nature and the cosmos.

#### RELI-1360 Religion in the United States

A study of religious diversity in the United States with emphasis on the Protestant, Catholic, Jewish and Islamic traditions. Attention may be given to such topics as Native American religion, civil religion, new religious movements, women in religion, and televangelism.

### Lower Division Courses at the 2000 Level

#### RELI-2400 What Is Religion?

This course examines the question of what religion is, including those aspects that today some people refer to as spiritual. Attention will be given to such related questions as: How do you think about or define religion? How have scholars thought about and defined religion? What are common elements of religious life found throughout the

world? What are the various functions of religion for societies and for individuals? How have scholars studied religion? How does one study a religion, or religion, if one is an outsider or is non-religious?

### RELI-2101 Biblical Hebrew

The primary goal of this course is to introduce students to ancient Hebrew so they will be able to read parts of the Hebrew Bible in the original language. This course begins with an introduction to the Hebrew alphabet and vowel system and therefore requires no prior knowledge of Hebrew. (Also listed as LAC 2101).

### RELI-2460 Philosophy of Religion

A critical discussion of philosophical issues arising in religion and theology. Typical topics covered include: religious language, arguments for God's existence, religious experience, miracles and revelation, the relationship of faith and reason, the nature of God, the problem of evil, death and immortality. (Also listed as PHIL 2438) (Offered every other year).

### RELI-2354 The Hebrew Bible/Old Testament

A study of the books of the Old Testament/Hebrew Scriptures in English translation. Some of the books will be read in their entirety, and substantial excerpts of most of the others will also be read so that all of the major types of literature present in the Old Testament/Hebrew Scriptures will be represented. The course will approach its subject matter primarily as literature, but attention will be given to the historical, cultural, and religious aspects of its production. The course will also consider the trajectory of its subject matter in Jewish and Christian thought, and in Western Culture.

### RELI-2355 The New Testament

A study of the writings that comprise the New Testament, with attention also to certain other early Christian documents not included in the New Testament. Most of the writings are read in their entirety, and they are examined with reference to their historical, cultural, religious, and literary contexts; their use as historical sources for the reconstruction of Christian origins; their role as a basis for Christian belief and practice; and their wider influence in Western and world cultures.

### RELI-2356 The Qur'an

Islam and Muslims have been embroiled in some of the most searing controversies of our age, and the Islamic scripture, the Qur'an, has been at the center of a number of these controversies. This course introduces students to the Qur'an, and how it is perceived by Muslims themselves. Religion 2356 deals with the importance of this sacred text for the religion of Islam, including its beliefs, rituals, and rites. The course also covers the history of the Qur'an and engages with key themes of the scripture. Students will be introduced to the content of the primary text and a selection of accessible secondary readings. Current hot-button questions such as "What does the Qur'an say about women?" or "Does the Qur'an legitimate violence?" will also be addressed.

## Upper Division Courses at the 3000 Level

### RELI-3401 Gender and Religion

An examination of the cultural expectations placed upon women and men in various religious traditions; the historical prevalence of patriarchy and differentiated gender roles; feminist and liberation movements for gender equality with a religious basis; challenges to heterosexism and the development of gay, lesbian, and transgender religious perspectives. (Offered every other year). Prerequisite: 1 course in Religion or consent of instructor

### RELI-3403 Death and Beyond

An examination of the significance of death for human existence and how various religious traditions find meaning in mortality; the ritual practices involved in the dying process, the disposition of the body, grieving, last rites, and the remembrance of the dead; cross-cultural concepts of heaven, hell, reincarnation, the soul, near-death experience, good and evil, salvation, enlightenment, and the ethical implications of religious notions of death. (Offered every other year). Prerequisite: 1 course in Religion or consent of instructor

### RELI-3312 Religion and Science in the West

An examination and discussion of issues in the history of the relation of religion and science in the Western world, with emphasis on developments from the Renaissance to the present. The course focuses on significant religion-science debates, such as those surrounding evolution and the mind/soul/body relation, and on methods and models in religion and science. Attention will be given to ways religion has influenced science, and science religion. Prerequisite: 1 course in Religion or consent of instructor.

### RELI-3413 Religion and Science in Asia

An examination and discussion of issues in the history of the relation of religion and science in Chinese, Hindu, and Islamic Cultures. Topics will include cosmology, astronomy, and astrology, on one hand, and biology and traditional systems of medicine on the other. Major theoretical issues will include the colonized discourse on religion and science in the Asian context, the variety of traditional Asian responses to modern science and the impact of cultural perspectives on the scientific enterprise. (Offered every other Year). Prerequisite: 1 Course in Religion or consent of instructor.

### RELI-3418 Religion and Film

This course introduces some of the many issues and theoretical perspectives in the study of religion and film. We explore images of religion and religious people in film and trace a number of recurring religious themes in recent popular films. We also examine popular films that do not have explicit religious themes through the lenses of theories of religion, myth, and ritual. (Offered every other year). Prerequisite: 1 course in Religion or consent of instructor.

## RELI-3431 The Hindu Tradition

A study of the major developments and schools within the tradition, from ancient times to the present; attention to mythological/theological perceptions and interpretations of the world, as well as to meditational, devotional, and ritual practices. Emphasized throughout the course is the interplay between contemporary insider and outsider perspectives. (Offered every other year) Prerequisite: RELI 1330 or consent of instructor

## RELI-3432 Buddhist Ecology

This course explores a central teaching of the Buddha, as well as a primary focus of Engaged Buddhism or Buddhist practice: the inter-relationship between humans and their environment. Buddhist Ecology examines the foundations of Buddhist ecological thinking through analysis of the Buddhist scriptural and historical traditions, as well as its applications in the modern world. Course texts include the sutras or discourses of the Buddha, the monastic code, contemporary statements by Buddhist thinkers and activists worldwide, and scholarly treatments of Buddhist thought and practice, Engaged Buddhism, and Buddhist Ecology. (Offered every other year)

## RELI-3433 Chinese Religions: Unity and Diversity

Religion 3433 explores Chinese religion through an in-depth study of its formative texts and historical evolution to the modern era. Emphasizing original sources in translation as well as critical studies by modern scholars, the course examines the cosmological framework of Chinese Religion as well as attitudes towards religious belief and practice reflected in scripture, commentaries, and philosophical works. Students will conduct original research on Chinese religion in its contemporary manifestations. (Offered every other year.) (Same as CHIN 3433.) Prerequisite: RELI 1330 or consent of instructor.

## RELI-3338 Greek Religious Experience

A study of Greek religious festivals designed to produce a coherent image of a year in the religious life of the ancient Greeks. Through a combination of archaeological and literary evidence, we will attempt to reconstruct the rituals performed at the various festivals and explore the ways in which they organized and articulated the community through shared religious experience. We shall also consider the ways in which religion organized civic space and gave it meaning. (Also listed as CLAS 3338).

## RELI-3441 Creating Judaism

This course introduces the student to the cultural, religious, political and social lives of Jews, covering the entirety of Jewish history. Using historical and religious studies approaches, students in this course will discuss Judaism(s) at different times and in different geographical locations focusing on questions of identifications and definition. (Offered every Spring) Prerequisite: RELI 2354 or consent of instructor.

## RELI-3442 Global Christianities

A study of Christianity within its modern socio-historical contexts. Possible topics within the course include the development of indigenous Christians in the two-thirds world, the rise of global Pentecostal-charismatic movements, the shift to the global south within Catholicism, the growth of post-communist Orthodoxy, mainline Protestant missionary endeavors, and evangelical Christian influence on political and social policies worldwide. (Offered every other year). Prerequisite: One Religion course

### RELI-3443 Islamic Worlds

An examination of Islam as a diverse, living tradition practiced by more than 1.5 billion people around the world. Students will learn about foundational aspects of the world's second largest religion, from its historical development, scriptural source (Qur'an), and modes of practice. The course will also engage contemporary issues, from perspectives on global violence and gender equality to the phenomena of Islam in America and anti-Muslim sentiment. Prerequisite: RELI 2356 or consent of instructor

### RELI-3444 Islam in North America

This seminar focuses on significant movements in the history of Islam in North America, including the forced arrival of African Muslim slaves to the "New World," the evolution of various African American ethno-religious communities, and various waves of Muslim immigration. We will look at processes of community building, institution building, and constructions of diverse North American Muslim identities. This course also examines how Islam has been and continues to be talked about and represented in North American society, for example, in political rhetoric and in the media. Special attention will be given to the issues of race, gender, and citizenship. (Offered every Spring.)

### RELI-3350 The Dead Sea Scrolls

In 1947 hundreds of ancient scrolls - including biblical texts and sectarian documents - were discovered in caves overlooking the Dead Sea. In this course we will examine the scrolls in an effort to learn more about the world of Second Temple Judaism, the history of the biblical texts, and the lifestyle and religious ideas of a small sectarian community; studying the scrolls will also provide a context for the emergence of rabbinic Judaism and early Christianity. In addition to learning about the scrolls and their contents, this course will also look at the archaeological remains of the ancient village of Qumran, where the scrolls were found. Prerequisite: RELI 2354 or consent of instructor

### RELI-3452 Jewish & Christian Apocalyptic Literature

This course examines ancient Jewish and Christian apocalyptic literature by (a) placing some of the texts that make up the genre within their larger historical and cultural contexts, (b) studying some of its major Jewish and Christian literary expressions, and (c) exploring its possible social, cultural and religious function. We also explore the legacies of apocalyptic thought in Western culture, especially in recent political discourse and in film. (Offered every other year). Prerequisite: 1 course in Religion or consent of instructor

## RELI-3353 The Gospels, Jesus, and Christian Origins

A study of the earliest extant literary portrayals of Jesus, with attention to what can be known about his life, message, activity, and fate as well as his significance for the origins of Christianity. Prerequisite: RELI 2355 or consent of instructor.

## RELI-3454 The Letters of Paul

A study of the extant writings attributed to Paul and included in the New Testament, with attention to the historical, cultural, religious, and literary context of these writings and to Paul's influence in early Christianity and in the history of Christian thought. Prerequisite: RELI 2354 or RELI 2355 or consent of instructor.

## RELI-3455 Early Christian Literature Beyond the Canon

This course explores the diversity of early Christianity in the first few centuries of the movement by examining early Christian texts not included in what eventually becomes the canon of Christian scripture, the New Testament. The course also explores the various methods and approaches used by scholars to study early Christian literature and history. (Offered every other year). Prerequisites: RELI 2354, or RELI 2355, or consent of instructor.

## RELI-3456 Digging for the Truth: Archaeology, Bibles, and Popular Media

This course explores the intersection of archaeology, the bibles, and popular media. More specifically, it explores how the popular media uses archaeology and the bibles to create history, and how their process differs from an academic approach. Some questions that will be addressed include: What is archaeology and how is it done? What can archaeology teach us? What can't archaeology teach us? What role should the biblical literature play in writing history? How does popular media's use of archaeology and the bibles differ from the historian's use of archaeology and the bibles? What kinds of motives - political, economic and religious - factor into the equation? Prerequisite: RELI 2354, or RELI 2355, or consent of instructor

## RELI-3457 Jerusalem

This is a course about the city of Jerusalem and the roles it has played (and continues to play) in lives of Jews, Christians, and Muslims. In order to learn about the city in this manner, we will explore not only the religious, but also the cultural, political, economic, and architectural histories of Jerusalem. What does Jerusalem mean to different religious communities? Has the meaning changed over time? How and why did this particular city become central to Judaism, Christianity and Islam?

## RELI-3458 Medieval Christian Mysticism

A survey of writings in the tradition of medieval Christian mysticism, from Augustine (d. 430) to John of the Cross (d. 1591). Major themes include the use of violent and erotic imagery, the move from Latin to vernacular languages like English, German, Spanish, and French, the importance of gender (whether the author's or the audience's) in the

shaping of this literature, and the relevance of medieval mysticism to modern thought. (Also listed as ENGL 3457)  
Prerequisite: At least one English course at the 2000 level or higher.

### RELI-3370 Sociology of Religion

A study of institutionalized and non-institutionalized forms of religious expression. Various forms of religious expression, their social sources, and their societal consequences will be examined. The relation between religion and secular institutions (the economy, polity, education, etc.) will be investigated. Particular attention will be focused on emerging forms of religious expression in modern urban-industrialized society. (Also listed as SOCI 3333.) (Offered occasionally.)

### RELI-3480 United States Latino Religious Practices and Traditions

This course examines the beliefs, theologies, and practices of diverse U.S. Latino communities. In addition to Catholicism and Protestantism, the course will review the impact of African and Native American religious traditions. The course critically examines how U.S. Latino religious experiences impact race, class, gender, and sexuality with a particular emphasis on examining the Latino community in San Antonio. (Offered every other year)  
Prerequisite: RELI 1360 or consent of instructor

### RELI-3481 Native American Religions

This course is an overview of Native American religious traditions in the United States. Topics covered may include Native revitalization movements, traditional Pueblo and Sioux dances, Native Christianity, modern Native religious thought, Peyote religion, issues of gender in Native American religion, boarding schools and Americanization, the role of white Christian missionaries, and the modern Native American evangelical movement. (Offered every other year.) Prerequisites: RELI 1360 or HIST 1360 or consent of instructor

### RELI-3482 African Religions in the Americas

This course will focus on the African religious traditions that developed into new expressions of faith in the United States, Caribbean, and Latin America. In this course we will cover a variety of religious traditions, including African-American Christianity, Santeria, Candomblé, Vodou, Rastafarianism, Islam, and folk practices such as the "conjuring" tradition. This course will also explore the role of gender within African/African-American traditions and issues of religion and social change such as the Civil Rights movement and Liberation Theology. Prerequisite: RELI 1360 or consent of instructor

### RELI-3-90 Reading and Conference

Individual work under supervision in areas not covered by other courses. Prerequisites: 12 semester hours in religion and approval of the department chair and instructor.

## RELI-3-91 Special Topics in Religion

From time to time, the department will offer special topic courses not described in the Bulletin. The topics may be in any area and may be offered at the initiative of departmental faculty or upon petition of interested students. Announcements of such courses will be by special prospectus. May be repeated on different topics. Prerequisite: Approval of instructor.

## Upper Division Courses at the 4000 Level

### RELI-4371 Topics in Social Scientific Study of Religion

An introduction to classic and contemporary social scientific studies of religion. The course may focus on a specific method applicable to the study of religion, or on a particular topic commonly arising in social scientific inquiries. An example of the former would be the functionalist approach; an example of the latter would be the problem of the sacred/profane distinction.

### RELI-4494 Religion Capstone

This course provides a capstone experience for students of Religion. During the semester students will: 1) reflect on, analyze, and evaluate the different approaches to the study of Religion encountered and utilized in Religion courses; 2) examine how experiences as a Religion major prepare students for the future; 3) develop their own project that "caps" their academic experience; and 4) organize an end-of-semester Colloquium. (Offered every year). Prerequisite: 4 courses in Religion This course is normally taken in the Junior or Senior year



# Scientific Computing

## Faculty

[Farzan Aminian, Ph.D.](#) , Professor, Engineering Science

[Saber N. Elaydi, Ph.D.](#) , Murchison Term Professor of Mathematics; Director

[Julio Roberto Hasfura-Buenaga, Ph.D.](#) , Associate Professor, Mathematics

[Mark C. Lewis, Ph.D.](#) , Professor, Computer Science

[Kevin Livingstone, Ph.D.](#) , Associate Professor, Biology

[Natasa Macura, Ph.D.](#) , Associate Professor, Mathematics

[David Ribble, Ph.D.](#) , Professor, Biology

[Dennis Ugolini, Ph.D.](#) , Professor, Physics and Astronomy

[Adam R. Urbach, Ph.D.](#) , Professor, Chemistry

## Overview

Scientific Computing is a multi-disciplinary program designed for science majors who wish to explore the application of computing within the natural sciences. It is intended primarily for students majoring in one of the natural sciences or engineering. The program of study brings together courses from Computer Science, Mathematics, and disciplines in the natural sciences. Each student takes the required core courses in computer science and calculus. After the core, two advanced-level courses selected from five options further hone quantitative skills needed for scientific computing. Students should work with their advisers to identify courses that are most appropriate for their backgrounds and goals. Finally, students bring their computation skills to their major by selecting one upper-level course from a list of approved disciplinary courses that make use of computation. Concurrent with this course, students enroll in SCOM 3199—Scientific Computing Project. Note: These disciplinary courses have several prerequisites that are not listed among the requirements for a minor in Scientific Computing—students majoring in a discipline among the natural sciences will have already fulfilled these prerequisites as part of their major.

Students interested in a Scientific Computing minor will submit an application to the chair of the Committee, who will assign a faculty adviser to the student. Completion of this program will be indicated on the student's transcript with the notation "Minor in Scientific Computing."

## Requirements

A minor in Scientific Computing will consist of a total of 19 to 20 credit hours, depending on the upper-level course selected in the major. The minor must include at least nine hours of upper-division courses in mathematics or science. The requirements for a minor in Scientific Computing are as follows:

## The Core (9 hours)

### I. Computation

CSCI 1320	Principles of Algorithm Design
CSCI 2323	Scientific Computing

### II. Calculus

MATH 1311	Calculus 1
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### III. Advanced Quantitative Skills (6 hours) Take two of the following five courses:

CSCI 3352	Simulation Theory
MATH 3311	Probabilistic Models in Life Sciences
MATH 3320	Probability and Statistics for Engineers and Scientists
MATH 3328	Mathematical Models in Life Sciences
MATH 3338	Mathematical Modeling

### IV. Disciplinary Practice (4-5 hours depending on the chosen elective)

A. SCOM 3199—Scientific Computing Project [Must be taken in conjunction with one of the courses listed below.]

B. And one of the following courses:

BIOL 3420	Animal Behavior
BIOL 3434	Ecology
BIOL 3464	Molecular Biology
CHEM 3334	Physical Chemistry (includes lab CHEM 3135)
MATH 4394*	Senior Project
PHYS 3321	Statistical Physics and Thermodynamics
PHYS 3322	Classical Mechanics and Nonlinear Dynamics
PHYS 3325	Optical Physics
PHYS 3336	Advanced Theoretical Physics
PHYS 4343	Quantum Physics II
PHYS 4346	Advanced Modern Physics

PSYC 3311	Sensation and Perception
PSYC 3431	Memory and Cognition
PSYC 3333	Simulation of Neural and Cognitive Processes

\* This course requires completion of a 3000-level course in Biology or Psychology.

## Courses

### SCOM-3199 Scientific Computing Project

The course involves undertaking a project that expands one of the laboratory or classroom exercises to make significant use of computers as a research tool. Students must work with a faculty mentor to develop an appropriate project (usually the instructor in the course). Co-requisite: Concurrent enrollment in one of the disciplinary practice courses approved for Section C of the requirements for this minor.

# Sociology and Anthropology

## Faculty

[Christine Drennon, Ph.D.](#) , Associate Professor  
[Sarah Beth Kaufman, Ph.D.](#) , Assistant Professor  
[Jennifer P. Mathews, Ph.D.](#) , Professor; Chair  
[Alfred Montoya, Ph.D.](#) , Associate Professor  
[Tahir H. Naqvi, Ph.d.](#) , Associate Professor  
[Richard K. Reed, Ph.D.](#) , Professor  
Benjamin Sosnaud, Ph.D. , Assistant Professor  
[David Spener, Ph.D.](#) , Professor  
[Amy L. Stone, Ph.D.](#) , Associate Professor  
[Sheryl Tynes, Ph.D.](#) , Professor; Vice President for Student Life

## Requirements

## The Major

The requirements for the degree of Bachelor of Arts with a major in sociology or anthropology are as follows:

### **I. Departmental requirements:**

A. The Sociology major consists of 33 credit hours to be taken as follows:

1. At least one lower division SOCI course..
2. Required courses: SOCI 2335 and 3359.
3. At least one of the following courses: SOCI 3460, 3365, or 3461.
4. At least 24 hours must be in upper division sociology courses chosen in consultation with the adviser. At least 28 hours of the 33 hours required for the Sociology major must be completed in residence at Trinity University. SOCI 2335, SOCI 3359, and SOCI 3460 or SOCI 3461 or SOCI 3365 must be completed in residence at Trinity University.

B. The Anthropology major consists of 33 credit hours to be taken as follows:

1. ANTH 1301 and one of the following courses: ANTH 1305 or 2310.
2. Required courses: ANTH 2401 and 3359.
3. At least one of the following courses: ANTH 3361, 3365, or 3460.
4. At least one of the following courses in archaeology or physical anthropology: ANTH 3335, ANTH 3356,

ANTH 3466, and ANTH 4354. ANTH 3394 and ANTH 4394 may also fulfill this requirement if approved by the department chair.

5. At least one of the following courses in cultural anthropology: ANTH 2339, ANTH 2357, 3327, 3428, 3329, 3331, 3343, 3345, 3445, 3446, 3448, 3349, 3452, 3355, 3367, and 3464. ANTH 3394 and ANTH 4394 may also fulfill this requirement if approved by the department chair.
6. At least 24 hours must be in upper division anthropology courses chosen in consultation with the adviser. At least 28 hours of the 33 hours required for the Anthropology major must be completed in residence at Trinity University. ANTH 2401, ANTH 3359, and ANTH 3460 or ANTH 3461 or ANTH 3365 must be completed in residence at Trinity University.

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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## The Minor

Two minors are offered in the Department of Sociology and Anthropology. The department requirements are as follows:

**I. The Sociology minor consists of 18 credit hours to be taken as follows:**

- A. Completion of at least one of the following courses: SOCI 1301, 1316, 2306, 2311, 2312, or 2314.
- B. At least 12 hours must be in upper division courses.

**II. The Anthropology minor consists of 18 credit hours to be taken as follows:**

- A. Completion of at least two of the following courses: ANTH 1301, 1305, or 2310.
- B. At least 12 hours must be in upper division courses.

Students in one of the two disciplines who choose to double major in the other may have no more than nine hours of overlap between the two disciplines.

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## Honors in Sociology and Anthropology

### **REQUIREMENTS FOR GRADUATING WITH MAJOR HONORS IN THE DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY**

Students will be eligible to graduate with Major Honors if they have fulfilled all the following requirements:

- a. maintained at least a 3.33 overall grade point average at Trinity;
  - b. maintained at least a 3.5 grade point average in their major in the Department of Sociology and Anthropology;
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- c. completed a Senior Thesis over the course of two semesters, enrolling in and successfully completing ANTH 4395 or SOCI 4395 in two consecutive semesters prior to graduation.,
- d. made an oral presentation of the Senior Thesis to the members of their Thesis Committee and the Chairperson of the Department of Sociology and Anthropology; and
- e. been unanimously recommended for graduation with Major Honors by the Thesis Committee and the Chairperson of the Department of Sociology and Anthropology.

To be considered for graduation with Major Honors, students should address a written request for consideration to the chairperson of the Department of Sociology and Anthropology no later than the end of the first full week of their penultimate semester at Trinity.

## Courses

### Sociology Courses - Lower Division

#### SOCI-1301 Introduction to Sociology

A study of the nature of human society. Special attention will be given to the nature of culture, social organization, personality development, institutions, and social stratification. (Offered every year.)

#### SOCI-1110 Service Learning: Homelessness

This course combines service-learning in the San Antonio community with sociological perspectives on housing, hunger, and homelessness. Students in this course will analyze their experiences volunteering at San Antonio service sites using insight gained from sociological readings, guest speakers, and lectures. This course includes coverage of the sources of social inequality in the United States, social welfare and policies, and pressing issues in different homeless demographic groups, including attention to homeless families, women, children, youth, and the chronically homeless. Students in this course will be required to complete at least 30 hours of volunteer work over the course of the semester at a pre-approved service site. (Offered every Fall.)

#### SOCI-1310 The Urban Experience

An introduction to the city, its origins, contemporary form, and likely future. The course will present the city and urban phenomena in both the American context and other national environments. The major emphasis will be placed on understanding the physical, social, economic, and political systems that create and sustain urban areas. (Also listed as URBS 1310)(Offered every year.)

#### SOCI-1316 People and Places in Global Context

A study of the complex ways in which modern social organization materializes geographically. Topics include the distribution and movement of human populations, characteristics and distribution of cultural mosaics, patterns of economic interdependence, and the forces of cooperation and conflict among peoples from both global and local perspectives. (Also listed as URBS 1316).

### SOCI-2311 Sociology of Gender

An analysis of the social construction of gender and its intersections with other axes of inequality, such as race, class, and sexuality, across social institutions and over time. (Offered every year).

### SOCI-2314 Social Problems and Human Values

A documented and critical analysis of major social problems in the United States, in a global as well as national context. This course aims at providing an understanding of the structure of society and of the underlying causes and conditions that maintain social problems. Special attention will be given to how we think about social problems: the social definitions of problems, the role of ideologies, the role of mass media, and the impact of these social processes on social policy formation. Students will explore their personal values in response to social issues in such areas as health, work, children's welfare, and the environment. (Offered every year.)

### SOCI-2323 Deviance: Social and Personal

An analysis of the current theoretical perspectives on deviant behavior and an examination of deviance in the context of the social-political conditions of contemporary society. Selected empirical studies will be used to examine specific problems, theory, and societal definitions and responses to deviance. (Offered occasionally.)

### SOCI-2328 Social Inequality

A study of the stratification of American society in terms of the unequal distribution of wealth, status, and power. Theories on the origin and development of social classes as well as of the functional necessity of social inequality will be examined along with empirical works dealing with inequality. (Also listed as URBS 2328). (Offered occasionally.)

### SOCI-2335 The Sociological Imagination

A critical survey of classical social theory of the 19th and early 20th centuries. The course will also examine the subsequent emergence of theories regarding other dimensions of social life - such as race, gender, sexuality, generational phenomena, and modern communication technologies - that classical theory did not adequately address. (offered every Spring.)

### SOCI-2339 Health, Illness, and Society

This course introduces students to medical anthropology and the sociology of health and illness. The course

focuses on 1) factors influencing morbidity/mortality and health/well-being and the forces conditioning the uneven distribution of these states; 2) cross-cultural experiences and meanings of health and illness; 3) the wide range of strategies, techniques, ways of knowing and apprehending and treating of and preventing sickness, of which contemporary biomedicine is but one. (Offered every Fall) (Also listed as ANTH 2339).

## Sociology Courses - Upper Division

### SOCI-3313 Social Movements

This course is an introduction to the theory and research on social movements with a focus on contemporary American movements. The sociological study of social movements emphasizes how political, organizational, and cultural factors shape social movement emergence and development. Movements studied in this class may include the women's movements, gay/lesbian activism, environmental movement, the civil rights movement, and disability activism. (Offered every other year.) Prerequisite: At least 3 hours completed in Sociology

### SOCI-3424 Crime and Criminal Justice

This course examines the causes of crime, as well as how we treat the problem of crime and try to prevent it. We will examine what crime and the criminal justice system look like in the United States in comparison to other countries and what criminologists believe are the causes of different types of crime. Through case studies, we will also look at some critical perspectives on mainstream beliefs about the causes of crime. (Offered every other year.) Prerequisite: At least 3 hours completed in Sociology

### SOCI-3428 Gender Transgressions

What does it mean to transgress gender rules? This class charts the range of gender transgressions in contemporary society, with attention to drag, intersex, and transgender practices and identities. It explores how gender transgressive individuals operate within existing social institutions, such as work and the family, and covers theories of gender performance. (Offered every other year.) Prerequisite: Any one of the following courses: Any lower division SOCI course, ANTH 1301, WAGS 2310, 2350, 2351, or 2352, or consent of instructor.

### SOCI-3327 Race in America

A study of relations between dominant and subaltern racial groups in the United States and other American republics. Special attention will be paid to the social construction of racial categories and the ways in which societies are stratified on the basis of nationality and racial group membership. The evolving dynamics of race relations will be considered with regard to matters of power, prestige, immigration, citizenship, and identity-formation. Various forms of contemporary racism and means of combating them will also be examined. (Offered every other year.) Prerequisite: At least 3 hours completed in Sociology, Anthropology, or Political Science



## SOCI-3329 Sexuality and Society

An investigation of the social construction and regulation of sexuality across cultures and through time. This perspective on sexuality looks at social, rather than biological or personal, explanations for how human sexuality is practiced. Specific topics may include queer studies, queer communities, and HIV/AIDS in society. (Also listed as ANTH 3329)(Offered every other year.) Prerequisite: At least 3 hours completed in ANTH or SOCI.

## SOCI-3331 Language, Culture, and Society

Students will analyze the functions of language in everyday life in various cultures, including the role of language in the social production and reproduction of power relations, stratification, gender roles, the formation of racial and ethnic identities, and in the process of social change. (Also listed as ANTH 3331.)(Offered occasionally.)

## SOCI-3340 Urban Geography

This course examines the history and contemporary processes of urbanization, primarily in the North American context. In particular, we are concerned with the geography of these processes, resulting in differentiation of space and the creation of distinct places. We will examine the geography of urbanization at several scales, ranging from the development of the North American urban system to the experiences of neighborhoods within cities. (Also listed as URBS 3340.) Prerequisite: At least 3 hours completed in Sociology.

## SOCI-3343 Relaciones fronteras Mexico-Estados Unidos (bilingue)

In this seminar we will examine a variety of social, cultural, political, and economic phenomena that characterize the Mexico-US border region. Includes an optional overnight excursion to communities located on the international boundary itself. This course is part of the Spanish across the Curriculum component of Trinity University's International Studies Program It is conducted bilingually in Spanish and English, i.e., in both languages of the Mexico-U.S. border region. Competence in speaking, reading, writing, and listening in both Spanish and English is a requirement for participation in the course. (Also listed as ANTH 3343 and LAC 3343.) (Offered occasionally.) Prerequisites: Completion of SPAN 2302 or equivalent Spanish competence

## SOCI-3345 International Issues in Health and the Environment

This course explores social factors, such as inequality and power, in creating environmental conditions that affect global health, focusing on marginalized regions and people. Case studies will explore historical colonization and urbanization and control of natural resources, in their degradation of the environment, effects of climate change, and risks to human and environmental health. (Also listed as ANTH 3345)(Offered occasionally.) Prerequisite: At least 3 hours completed in ANTH or SOCI

## SOCI-3445 Understanding Refugees

An interdisciplinary study of the refugee experience from global and local perspectives. The course will examine

how the human rights of refugees are understood from the points of view of international law, humanitarian institutions, and of refugees themselves. The ways in which refugees negotiate the trauma of the past and the demands of everyday life in cities in their host countries will also be examined. Includes a directed field research experience. (Also listed as ANTH 3445 and URBS 3445). (Offered every other year.) Prerequisite: At least 3 hours completed in ANTH, SOCI, or URBS

### SOCI-3346 Childhood and Youth

Social factors surrounding childhood and children's perceptions of social life, reveal a great deal about society in general. The purpose of this course is to provide a sociological frame work for understanding the roles of childhood and youth in society. This framework will involve historical, cross-cultural, economic, and political considerations of childhood and young adulthood. Using comparative and historical methods, we will examine the changing social status of children. Various social institutions, such as families, education, and the media, will be studied. Finally, we will study how contemporary American children and young adults fare, and why this is so. (Offered occasionally.) Prerequisite: At least 3 hours completed in Sociology

### SOCI-3446 Punishment and Society

While much of criminology is concerned with understanding why people commit crime, this course focuses on society's response to crime. As such, the course is an introduction to the ways social scientists measure, think about, and theorize punishment. It introduces students to the American model of criminal punishment, contextualizes the American system internationally, and critically analyzes concepts of punishment generally. (Also listed as ANTH 3446). (Offered every Spring).

### SOCI-3349 Globalization and Social Change

Study of the relationship between economic development and social change at the international level. Examines the rise of capitalism as a global mode of production and its impact on local cultures in the contemporary period. Special attention paid to the rise of transnational communities and grassroots movements for social justice. (Also listed as ANTH 3349.) (Offered every other year.) Prerequisites: At least 3 hours completed in ANTH, ECON, PLSI, or SOCI.

### SOCI-3350 Sociology of Law

The content and form of legal systems provide a framework for the examination of two key sociological concepts: social organization and social control. This course will focus on sociological theories of law as developed by Durkheim, Weber, and Marx. The course will also examine modern perspectives with a focus on sociological jurisprudence and criminal law. Course materials will be supplemented with an examination of current issues in the development and application of law. (Offered occasionally.) Prerequisite: At least 3 hours completed in SOCI.

### SOCI-3355 HIV/AIDS: Nature, Power, Populations

This course is an interdisciplinary introduction to the HIV/AIDS epidemic. It examines the biological, historical, sociocultural, political, economic, ethical, and technological dimensions of the current epidemic, drawing from work in anthropology, sociology, the history of science/medicine, philosophy, epidemiology, and public health. (Offered every other Spring.) (Also listed as ANTH 3355.) Prerequisites: At least 3 hours completed in ANTH or SOCI.

### SOCI-3159 Social Research Skills Workshop

A hands-on workshop integrating new research methods with emerging social scientific software. Attention will be given to the analysis of qualitative, quantitative, and spatial data using computer software, along with developing research skills in interviewing, survey collection, and creating databases. Must be taken concurrently with SOCI 3359. (Also listed as ANTH 3159.) (Offered every Fall.) Prerequisite: At least 6 hours completed in Sociology and/or Anthropology.

### SOCI-3359 Social Research Design

An introduction to the basic research techniques used in the social sciences with an emphasis on research design, data collection, and analysis. This course will include an overview of common methods in the social sciences, including ethnography, qualitative interviews, focus groups, historical comparative methods, experiments, and survey methods. SOCI 3159 must be taken concurrently. (Also listed as ANTH 3359)(Offered every Fall.) Prerequisite: At least 6 hours completed in ANTH and/or SOCI

### SOCI-3460 Research Methods: Applied Social Statistics

This course provides a hands-on approach for learning how to undertake quantitative social research focused on the design and completion of a semester long research project. A variety of statistical tools are addressed, including descriptive statistics, tests of significance, linear regression, and correlation. The course goals emphasize writing and rewriting, learning how to formulate and test research hypotheses, and understanding how to present results in an accurate and effective manner.(Also listed as ANTH 3460 and URBS 3460)(Offered every Spring.) Prerequisite: ANTH 3359 or SOCI 3356

### SOCI-3461 Research Methods: Fieldwork

This course provides a hands-on approach for learning how to undertake qualitative research through fieldwork, focused on the design and completion of a semester long research project. The course goals emphasize survey and interview techniques, writing and rewriting, and understanding how to present results in an accurate and effective manner. (Also ANTH 3461)(Offered every Spring) Prerequisites: SOCI/ANTH 3359

### SOCI-3365 Research Methods: GIS

This course provides a hands-on approach for learning how to undertake spatial social research focused on the design and completion of a semester-long research project. Spatial tools introduced emphasize geographic information systems. The course goals include map making and the integration of information technology and

cartography. (Also listed as URBS/ANTH 3365). (Offered every year.) Prerequisite: SOCI 3359 or ANTH 3359

### SOCI-3-91 Special Topics Seminar

Topics will vary according to faculty and student interest. A student may repeat the course if the topics change. (Offered occasionally.)

### SOCI-3-71 Sociology Internship

Professional work experience with a government agency, private business, or non-profit organization in which students apply their anthropological skills and knowledge. Students should contact the chairperson of the Department of Sociology and Anthropology for more information about procedures to follow for arranging and completing an internship. A student may repeat the course for a maximum of six semester hours. This course is taken Pass/Fail. (Offered every semester.) Prerequisite: consent of instructor.

### SOCI-3-90 Sociology Independent Study

Individual research in selected areas. A student may repeat the course for a maximum of six semester hours. A project proposal must be submitted to and approved by the professor supervising the research prior to registration. Prerequisite: Consent of instructor

### SOCI-4394 Senior Special Topics Seminar

Topics will vary according to faculty and student interest. A student may repeat the course if the topics change. (Offered occasionally.) Prerequisite: consent of instructor.

### SOCI-4395 Senior Thesis

Students will conduct research on a topic of their choice and produce a written thesis under the supervision of at least two tenured or tenure-track members the Trinity University faculty, at least one of whom must hold a Ph.D. in Sociology. To graduate with honors in the major, students must enroll in this course in each of their last two semesters at Trinity. Students should contact the chairperson of the Department of Sociology and Anthropology for more information about procedures to follow for writing a senior thesis. (Offered every semester.) Prerequisites: Consent of instructor and Senior standing.

## Anthropology Courses - Lower Division

### ANTH-1301 Introduction to Anthropology

Variation in human thought and behavior is viewed in diverse cultural settings. The anthropological perspective on

sociocultural processes at work in contemporary societies is presented. (Offered every semester.)

### ANTH-1304 Introduction to Classical Archaeology

An introduction to the history of archaeological activity in the Mediterranean and archaeological theory and field techniques. Course will also examine major sites and monuments of ancient Greece and Rome. (Also listed as CLAS 1304.)

### ANTH-1305 Introduction to Prehistoric Archaeology

Introduction to the methods and theories of prehistoric archaeology and the study of the origin and development of culture beginning with the earliest evidence and including the rise of complex societies known as civilizations in the Old and New Worlds. (Offered every year.)

### ANTH-1309 Pirates, Merchants, and Marines: Seafaring in the Ancient Mediterranean

This course explores how human relations with the sea affected the social, economic, military, political, and technological aspects of life in the ancient Mediterranean littoral. Evidence includes hulls and cargoes of shipwrecks, harbor- works, inscriptions, graffiti, wall paintings and mosaics, literary texts, and gravestones. A central focus will be an introduction to the methodology and technologies of archaeology, but the subject matter of this course and the nature of the discipline of maritime archaeology incorporate methodologies and substance also from the fields of Anthropology, Ethnography, Physical Sciences, Engineering, Art History, History and Geography. (Also listed as CLAS 1309.)

### ANTH-2310 Human Evolution

Human evolution studied through fossil and archaeological evidence; description and explanation of modern human biological variation; and the study of non-human primates in order to develop perspectives on the human capacity for culture. (Offered every year.)

### ANTH-2339 Health, Illness, and Society

This course introduces students to medical anthropology and the sociology of health and illness. The course focuses on 1) factors influencing morbidity/mortality and health/well-being and the forces conditioning the uneven distribution of these states; 2) cross-cultural experiences and meanings of health and illness; 3) the wide range of strategies, techniques, ways of knowing and apprehending, treating, and preventing sickness, of which contemporary biomedicine is but one. (Offered every Fall.) (Also listed as SOCI 2339.)

### ANTH-2357 Humans and the Environment

The seminar will analyze humans' relationship with the natural environment. It will first focus on cultural adaptation to natural resources, with case studies drawn from African foragers, South American gardeners, and

Asian farmers. The course will also analyze the effects of contemporary development, focusing on the destruction of the rainforest. The class will try to create new models for development from indigenous peoples' use of tropical resources. (Offered every year.)

### ANTH-2401 The Anthropological Imagination

This course provides students a comprehensive understanding of anthropology as an academic discipline, focusing on anthropologists and what they do. Rather than read a text or abstract debates, the class studies specific anthropologists and the classic ethnographies they wrote concerning non-Western cultures, looking at how each work was shaped by the particular life and time of the author. Classic studies will be chosen from each of the major periods in anthropology's history : from functionalism and structuralism to more recent work in Marxist, feminist, and interpretive anthropology. (Offered Every Spring)

## Anthropology Courses - Upper Division

### ANTH-3327 Race in America

A study of relations between dominant and subaltern racial groups in the United States and other American republics. Special attention will be paid to the social construction of racial categories and the ways in which societies are stratified on the basis of nationality and racial group membership. The evolving dynamics of race relations will be considered with regard to matters of power, prestige, immigration, citizenship, and identity-formation. Various forms of contemporary racism and means of combating them will also be examined. (Offered every other year.) Prerequisite: At least 3 hours completed in SOCI, ANTH, or PLSI.

### ANTH-3428 Gender Transgressions

What does it mean to transgress gender rules? This class charts the range of gender transgressions in contemporary society, with attention to drag, intersex, and transgender practices and identities. It explores how gender transgressive individuals operate within existing social institutions, such as work and the family, and covers theories of gender performance. (Offered every other year). Prerequisite: Any one of the following courses: Any lower division SOCI course, ANTH 1301, WAGS 2310, 2350, 2351, or 2352. Or consent of instructor.

### ANTH-3329 Sexuality and Society

An investigation of the social construction and regulation of sexuality across cultures and through time. This perspective on sexuality look at social, rather than biological or personal, explanations for how human sexuality is practiced. Specific topics may include queer studies, queer communities, and HIV/AIDS in society. (Also listed as SOCI 3329)(Offered every other year.) Prerequisite: At least 3 hours completed in Sociology or Anthropology

### ANTH-3331 Language, Culture, and Society

Students will analyze the functions of language in everyday life in various cultures, including the role of language in the social production and reproduction of power relations, stratification, gender roles, the formation of racial and ethnic identities, and in the process of social change. (Also listed as SOCI 3331.) (Offered occasionally.)

### ANTH-3335 Pre-Columbian Art of Mesoamerica

This course is a survey of the art of the ancient peoples of Mesoamerica. It will examine the art of a variety of major groups, including the Olmec, the Maya, the Toltec, the Zapotec, the Mixtec, and the Aztec, as well as other indigenous peoples of Western Mexico and the Gulf Coast. (Also listed as ARTH 3335.) (Offered every other year.)

### ANTH-3340 Eating and Drinking in the Nineteenth Century

This course focuses on food commodities of the 1800s to provide insight into the cultural traditions, politics, working conditions, social class, gender, and racial tensions of the 19th century. Many of these edible goods have deep histories beginning in prehistoric times, which come to a head during the 19th and early 20th century when they become major food commodities on the world market. In this course, we will draw upon literature from anthropology, history, and food studies to examine how food commodities reflect the revolutionary and tumultuous times of the nineteenth century and reveal a great deal about the daily lives of their producers, traders, and consumers. (Offered every other year.)

### ANTH-3343 Relaciones Fronterzas Mexico-Estados Unidos (bilingue)

In this seminar we will examine a variety of social, cultural, political, and economic phenomena that characterize the Mexico-United States border region. Includes an optional overnight excursion to communities located on the international boundary itself. This course is part of Spanish across the Curriculum component of Trinity University's International Studies Program. It is conducted bilingually in Spanish and English, i.e. in both languages of the Mexico-U.S. border region. Competence in speaking, reading, writing, and listening in both Spanish and English is a requirement for participation in the course. (Also listed as LAC 3343 and SOCI 3343) (Offered occasionally.) Prerequisites: Completion of SPAN 2302 or equivalent Spanish competence

### ANTH-3345 International Issues in Health and the Environment

This course explores social factors, such as inequality and power, in creating environmental conditions that affect global health, focusing on marginalized regions and people. Case studies will explore historical colonization and urbanization and control of natural resources, in their degradation of the environment, effects of climate change, and risks to human and environmental health. (Also listed as ANTH 3345) (Offered occasionally.) Prerequisite: At least 3 hours completed in SOCI or ANTH.

### ANTH-3445 Understanding Refugees

An interdisciplinary study of the refugee experience from global and local perspectives. The course will examine how the human rights of refugees are understood from the points of view of international law, humanitarian

institutions, and of refugees themselves. The ways in which refugees negotiate the trauma of the past and the demands of everyday life in cities in their host countries will also be examined. Includes a directed field research experience. (Also listed as URBS 3445 and SOCI 3445). (Offered every other year.) Prerequisite: At least 3 hours completed in ANTH, SOCI, or URBS.

### ANTH-3446 Punishment and Society

While much of criminology is concerned with understanding why people commit crime, this course focuses on society's response to crime. As such, the course is an introduction to the ways social scientists measure, think about, and theorize punishment. It introduces students to the American model of criminal punishment, contextualizes the American system internationally, and critically analyzes concepts of punishment generally. (Also listed as ANTH 3446.) (Offered every Spring.)

### ANTH-3448 Modern South Asia: India, Pakistan, and Beyond

This interdisciplinary course explores the historical, cultural, and political terrain of modern South Asia, a region that includes India, Pakistan, Bangladesh, Nepal, and Sri Lanka. (Offered every other year.) Prerequisite: PLSI 1331 or at least 3 hours completed in ANTH.

### ANTH-3349 Globalization and Social Change

Study of the relationship between economic development and social change at the international level. Examines the rise of capitalism as a global mode of production and its impact on local cultures in the contemporary period. Special attention paid to the rise of transnational communities and grassroots movements for social justice. (Also listed as SOCI 3349) (Offered every other year.) Prerequisites: At least 3 hours completed in ANTH, ECON, PLSI, or SOCI.

### ANTH-3452 Global Cities: Africa, Asia, and the Americas

This course offers theoretical and empirical tools for the study of urban processes in Asia, Africa, and the Americas. It examines the major problems of housing and infrastructure confronting cities in these regions and emphasizes the role of globalization in urban transformation. (Offered every other year). (Also listed as URBS 3452) Prerequisite: URBS 1310 or at least 3 hours completed in ANTH.

### ANTH-3355 HIV/AIDS: Nature, Power, Populations

This course is an interdisciplinary introduction to the HIV/AIDS epidemic. It examines the biological, historical, sociocultural, political, economic, ethical, and technological dimensions of the current epidemic, drawing from work in anthropology, sociology, the history of science/medicine, philosophy, epidemiology, and public health. (Offered every other Spring.) (Also listed as SOCI 3355.) Prerequisites: At least 3 hours completed in ANTH or SOCI.



## ANTH-3356 Seminar on the Ancient Maya

This course surveys the culture of the ancient Maya, including material culture, as well as mythology, calendrics, art, and writing. It will cover several ancient Maya sites in depth, as well as the contact period and the contemporary Maya. (Offered every other year.)

## ANTH-3159 Social Research Skills Workshop

A hands-on workshop integrating new research methods with emerging social scientific software. Attention will be given to the analysis of qualitative, quantitative, and spatial data using computer software, along with developing research skills in interviewing, survey collection, and creating databases. Must be taken concurrently with ANTH 3359. (Also listed as SOCI 3159.) (Offered every Fall.) Prerequisite: At least 6 hours completed in SOCI and/or ANTH.

## ANTH-3359 Social Research Design

An introduction to the basic research techniques used in the social sciences with an emphasis on research design, data collection, and analysis. This course will include an overview of common methods within the social sciences, including ethnography, qualitative interviews, secondary data analysis, content analysis, and survey methods. ANTH 3159 must be taken concurrently. (Also listed as SOCI 3359.) (Offered every Fall.) Prerequisite: At least 6 hours completed in SOCI and/or ANTH.

## ANTH-3460 Research Methods: Applied Social Statistics

This course provides a hands-on approach for learning how to undertake quantitative social research focused on the design and completion of a semester long research project. A variety of statistical tools are addressed, including descriptive statistics, tests of significance, linear regression, and correlation. The course goals emphasize writing and rewriting, learning how to formulate and test research hypotheses, and understanding how to present results in an accurate and effective manner. (Also listed as SOCI 3460 and URBS 4360.) (Offered every Spring.) Prerequisite: ANTH 3369 or SOCI 3359.

## ANTH-3461 Research Methods: Fieldwork

This course provides a hands-on approach for learning how to undertake qualitative research through fieldwork, focused on the design and completion of a semester long research project. The course goals emphasize survey and interview techniques, writing and rewriting, and understanding how to present results in an accurate and effective manner. (Also listed as SOCI 3461.) (Offered every Spring.) Prerequisite: ANTH/SOCI 3359.

## ANTH-3464 Morality in the Marketplace

The course explores rationality and morality in economic relations from a cross-cultural perspective. Lectures and readings will draw on neoclassical, Marxist, and cultural ecological models and case studies in Southeast Asia and

Latin America. In addition to analyzing tribal and peasant economies, this course will study theories of global economic development. In addition to 3 credit hours of lecture and discussion, this course will include a 1 credit hour tutorial in anthropological research and writing. (Offered occasionally.) Prerequisite: At least 3 hours completed in ANTH.

### ANTH-3365 Research Methods: GIS

This course provides a hands-on approach for learning how to undertake spatial social research focused on the design and completion of a semester-long research project. Spatial tools introduced emphasize geographic information systems. The course goals include map making and the integration of information technology and cartography. (Also listed as URBS/SOCI 3365). (Offered every year.) Prerequisite: ANTH 3359 or SOCI 3359.

### ANTH-3466 Anthropological Forensics

This course is a broad overview of anthropological forensics, and will include laboratory projects in which students catalogue human remains, determining age, sex, ancestry, and stature of a laboratory collection of human bones. Specific attention is paid to forensics and human rights, forensic case studies, and techniques such as forensic entomology and dental ontology. Students should be prepared for a strenuous work load, including extensive readings, oral presentations, a major research paper, laboratory reports, and a significant amount of independent lab work. Meets 4 hours per week. (Offered occasionally.) Prerequisite: ANTH 2310

### ANTH-3367 South American Indigenous Peoples: Conquest and Development

The impact of colonialism and development on tropical forest and Andean Indian societies in South America with emphasis on the influence of native social and cultural systems in these groups' relations with national societies and international economies. (Offered occasionally.) Prerequisite: At least 3 hours completed in ANTH.

### ANTH-3368 Anthropological Ethics

This course will analyze ethical case studies and their ramifications in socio-cultural anthropology, physical anthropology, and archeology. Case studies will range from historical incidents that shaped the ethics of current anthropology to ethical dilemmas of practitioners in the field today. (Offered occasionally.) Prerequisite: At least 3 hours completed in ANTH.

### ANTH-3-91 Special Topics Seminar

Topics will vary according to faculty and student interest. A student may repeat the course if the topics change. (Offered occasionally.)

### ANTH-3-71 Anthropology Internship

Professional work experience with a government agency, private business, or non-profit organization in which

students apply their anthropological skills and knowledge. Students should contact the chairperson of the Department of Sociology and Anthropology for more information about procedures to follow for arranging and completing an internship. A student may repeat the course for a maximum of six semester hours. This course is taken Pass/Fail. (Offered every semester.) Prerequisite: consent of instructor.

### ANTH-3-72 Archaeological Practicum

Participation in an approved excavation in the Mediterranean world, Western Europe, or the Near East. Students will be expected to receive instruction in excavation techniques and in the recording and study of the site and the material. Two weeks' work will normally be counted as equivalent to 1 credit, up to a maximum of 3 credits. (Also listed as CLAS 4-72.) (Offered occasionally.) Prerequisite: Consent of Instructor.

### ANTH-3-73 Archaeological Fieldwork

Field work experience in a setting arranged and approved by the student, professor, and agency selected. Supervision and guidance must be provided in the field. (Offered occasionally.) Prerequisite: Consent of Instructor.

### ANTH-3-90 Anthropology Independent Study

Individual research in selected areas. A student may repeat the course for a maximum of six semester hours. A project proposal must be submitted to and approved by the professor supervising the research prior to registration. Prerequisites: Consent of Instructor.

### ANTH-4-71 Anthropology Internship

Field work experience in a setting arranged and approved by the student, professor and agency selected. Supervision and guidance must be provided in the field and contact with the professor must be maintained. A student may repeat the course for a maximum of six semester hours. This course is taken Pass/Fail. Prerequisite: Consent of Instructor

### ANTH-4354 Seminar on Primatology

Advanced study of human evolution, ecological conservation, and culture and behavior by investigation of humans' closest living relatives, the non-human primates. Includes completion of a research project involving primate observation and original data collection about primate behavior. (Offered every other year.) Prerequisite: ANTH 2310.

### ANTH-4-72 Archaeological Practicum

Participation in an approved excavation in the Mediterranean world, Western Europe, or the Near East. Students will be expected to receive instruction in excavation techniques and in the recording and study of the site and the material. Two weeks' work will normally be counted as equivalent to 1 credit, up to a maximum of 3 credits. (Also

listed as CLAS 4-72.) (Offered occasionally.) Prerequisite: Consent of Instructor

### ANTH-4394 Senior Special Topics Seminar

Topics will vary according to faculty and student interest. A student may repeat the course if the topics change. (Offered occasionally.) Prerequisite: consent of instructor.

### ANTH-4395 Senior Thesis

Students will conduct research on a topic of their choice and produce a written thesis under the supervision of at least two tenured or tenure-track members of the Trinity University faculty, at least one of whom must hold a Ph.D. in Anthropology. To graduate with honors in the major, students must enroll in this course in each of their last two semesters at Trinity. Students should contact the chairperson of the Department of Sociology and Anthropology for more information about procedures to follow for writing a senior thesis. (Offered every semester.) Prerequisites: Consent of instructor and Senior standing.

# Business, School of

## Faculty

### School of Business

[Robert F. Scherer, Ph.D., SPHR](#) , Professor, Dean of the School of Business

### Department of Accounting

[Ashley Douglass, Ph.D.](#) , Assistant Professor

[Amy Holmes, Ph.D.](#) , Assistant Professor

[Jared, Koreff, Ph.D.](#) , Assistant Professor

[Julie Persellin, Ph.D.](#) , Associate Professor; Chair

[John Daniel Rice, J.D.](#) , Associate Professor

[Linda Specht, J.D.](#) , Associate Professor

### Department of Business Administration

[William T. Burke III, J.D.](#) , Associate Professor

[Mario Gonzalez-Fuentes, Ph.D.](#) , Assistant Professor

[Rita Drieghe Kosnik, Ph.D.](#) , Professor

[Yi Liu, Ph.D.](#) , Assistant Professor

[Dominic G. Morais, Ph.D.](#) , Assistant Professor

[J. Charlene Davis, Ph.D.](#) , Professor; Chair

[Kim Robertson, Ph.D.](#) , Associate Professor

[Jacob K. Tingle, Ed.D.](#) , Assistant Professor of the Practice of Business Administration; Co-Director of the Center for Experiential Learning and Career Success

[Deli Yang, Ph.D.](#) , Richard M. Burr and Donald N. Clark Professor of International Business; Associate Dean of the School of Business

### Department of Finance and Decision Sciences

[Jorge Colazo, Ph.D.](#) , Associate Professor; Chair

[Tianxi Dong, Ph.D.](#) , Assistant Professor

[Eugenio Dante Suarez, Ph.D.](#) , Associate Professor

[Diana Young, Ph.D.](#) , Assistant Professor

[Mauro Gonzaga de Oliveira, Ph.D.](#) , Assistant Professor

## Overview

The School of Business offers five Bachelor of Science degrees and one Bachelor of Arts degree. The Bachelor of Science degrees are designed to accommodate those students who want to pursue specialized study in the following areas: accounting, finance, business analytics and technology, international business, and business administration (with concentrations in either marketing or management). The Bachelor of Arts degree is designed to accommodate those students who do not wish to pursue an in-depth study of one of the areas in business, but who also desire to undertake a double major, where one of those majors is business. These degree programs are accredited by AACSB International – The Association to Advance Collegiate Schools of Business International.

Students pursuing the Bachelor of Science degrees complete a core of 28 credit hours with additional major-specific requirements. Students pursuing the Bachelor of Arts degree complete a core of 28 credit hours and six hours of electives beyond that core. A student who pursues either a major or a minor in the School of Business must take at least 50% of the School of Business credit hours that apply toward his/her degree at Trinity University. Furthermore, at least 50% of the credit hours identified as major or concentration requirements for the Bachelor of Science degree in the School of Business must be taken at Trinity University.

The degree programs are designed to fulfill the needs of students who, upon graduation, intend immediately to pursue careers in business, government, or the non-profit sector, as well as those students who plan to undertake graduate study in business or law. The School of Business core includes those courses prospective employers are most apt to require and that are generally required as prerequisites for most Master of Business Administration degree programs, as well as being desired courses for graduate study in law.

Students should apply for admission to major in accounting, finance, business analytics and technology, international business, or business administration early in the sophomore year so that they may be assigned a major adviser. The advising process is important for all School of Business majors as it provides a basis for the development of a comprehensive program that best meets both the academic and career objectives of the student.

The general requirements for the Bachelor of Science and Bachelor of Arts degrees are listed below. For full admission to any School of Business major, a student must first complete ACCT 1301, ECON 1311, BAT 2301, and one of MATH 1305 or MATH 1311, all with grades of C or better. Provisional acceptance may be granted if it is apparent that an applicant can meet the requirements for full acceptance by the end of the semester in which application is made.

## Requirements

- [Bachelor of Science in Accounting](#)
- [Bachelor of Science in Business Administration](#)
- [Bachelor of Science in Business Analytics and Technology](#)

- [Bachelor of Science in Finance](#)
- [Bachelor of Science in International Business](#)
- [Bachelor of Arts in Business](#)
- [Master of Science in Accounting](#)
- [Minor in Business](#)
- [Minor in Business Administration Legal Studies](#)

## Bachelor of Science in Accounting Degree

The requirements for the Bachelor of Science in Accounting degree are as follows:

I. One of MATH 1305 or MATH 1311.

II. Core business curriculum (28 hours): ACCT 1301; BAT 1101 or 1102, 2301, 2302, 3301; BUSN 3302, 4301; FNCE 3301; MGMT 2301; and MKTG 2301.

Note: ECON 1311 is a prerequisite for FNCE 3301 and ECON 1312 is a prerequisite for BUSN 4301. In order to satisfy these prerequisite requirements, ECON 1311 and ECON 1312 may not be taken on a pass/fail basis.

a. Accounting major requirements (21 hours):

I. Required courses (18 hours): ACCT 1302, 3341, 3342, 3343, 4344, and BUSN 3341.

II. Elective courses (3 hours): Students must complete at least three hours of business electives that may include ACCT 4397, ACCT 4697, or any other upper division non-core course offered or cross-listed by any department in the School of Business. Whenever possible, students are encouraged to select courses that offer significant experiential components.

b. Completion of an approved study abroad experience or the successful completion of a modern foreign language course numbered 2302, or its equivalent.

c. Completion of electives sufficient to bring the total credit hours outside of the School of Business to at least 60.

d. Completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

For full admission to any School of Business major, a student must first complete the following courses with grades of C or better:

1. ACCT 1301
2. MATH 1305 or MATH 1311
3. ECON 1311
4. BAT 2301

Provisional acceptance may be granted if it is apparent that an applicant can meet the requirements for full acceptance by the end of the semester in which application is made.

Although not a requirement for the major, the norm is that students also complete a paid internship (ACCT 4697) during their senior year. Because the sequencing of courses is critical for students to be able to do so and to otherwise complete the academic requirements for the B.S. degree in four years, the following guidance is provided.

1. Year 1 & 2: Students should enroll in ACCT 1301, ACCT 1302. Students who intend to study abroad as a part of their major requirements should plan on completing study abroad prior to their junior year or during a summer.
2. Junior: Fall semester – ACCT 3341, ACCT 3343; Spring semester – ACCT 3342.
3. Senior: Fall semester – ACCT 4344; Spring semester – ACCT 4697, BUSN 3341, and BUSN 4301.

Note that a student intern will be enrolled for only 12 hours during the spring semester of the senior year; therefore, it is imperative that a minimum of 112 hours have been completed by the end of the fall semester senior year and that BUSN 3341 and BUSN 4301 be deferred until the spring semester senior year.

Prospective students should also note that the State of Texas requires that a CPA candidate complete a minimum of 150 credit hours in order to take the Uniform Certified Public Accountant Examination. This major only partially satisfies those educational requirements, so a student intending to sit for the CPA exam will also need to complete graduate study in accounting. The Department of Accounting in the School of Business offers a two-semester Master of Science in Accounting degree program which, in combination with the B.S. in accounting, completes the hour credit and course requirements for CPA candidacy. Students interested in learning more about the accounting program should contact the Chair of the Department of Accounting for additional information.

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## Master of Science in Accounting Degree

The Master of Science in Accounting program is a two-semester program that typically is undertaken as a fifth year of study by students who have completed the Bachelor of Science degree in Accounting. The program is structured to develop and perfect technical, theoretical, and interpersonal skills required of accounting professionals. Upon completion of an undergraduate accounting degree and the Master of Science in Accounting program, the student will have satisfied the educational requirements for the Uniform Certified Public Accountant Examination in the state of Texas.

The requirements for full admission to the program include:

- Senior standing as an undergraduate student, or a baccalaureate degree.
- Completion of six undergraduate Accounting courses: (ACCT 1301, 1302, 3341, 3342, 3343, 4344) or their equivalent with acceptable grades. Students who do not have an undergraduate business degree will need



three additional business courses to meet CPA exam requirements in Texas.

- A grade point average of 3.00 or better on the last 60 hours of undergraduate level work and an average of 3.00 or better in upper division Accounting coursework.
- Acceptable scores not more than five years old on the Graduate Management Admissions Test (GMAT).
- Two letters of recommendation from professors or employers regarding the applicant's character, motivation, and intellectual ability.

In evaluating an application for graduate study, the department chair or program director will consider the applicant's commitment to and suitability for the profession. Applicants who meet the requirements for regular admission may nonetheless be denied admission if significant academic, ethical, or dispositional concerns are identified as part of the admission process.

Students who do not meet the requirements for unconditional acceptance may be considered for acceptance on a provisional basis.

## Course of Study

Students are scheduled for five courses during each of the two semesters of graduate study. Courses include:

1. ACCT-5341 Accounting Theory
2. ACCT-5342 Accounting Information Systems
3. ACCT-5343 Seminar in Advanced Federal Tax
4. ACCT-5344 Advanced Auditing: Professional Standards and Practices
5. ACCT-5345 Advanced Managerial Accounting
6. ACCT-5346 Advanced Financial and Nonprofit Accounting
7. ACCT-5349 Seminar in Ethics and Professional Responsibility
8. ACCT-5390 Special Topics in Accounting (2)
9. MGMT-5372 Conflict Management

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## Bachelor of Science in Business Administration Degree

The requirements for the Bachelor of Science in Business Administration degree are as follows:

- I. One of MATH 1305 or MATH 1311.
- II. Core business curriculum (28 hours): ACCT 1301; BAT 1101 or 1102, 2301, 2302, 3301; BUSN 3302, 4301; FNCE 3301; MGMT 2301; and MKTG 2301.

Note: ECON 1311 is prerequisite for FNCE 3301 and ECON 1312 is prerequisite for BUSN 4301. In order to satisfy these prerequisite requirements, ECON 1311 and ECON 1312 may not be taken on a pass/fail basis.

III. Concentration requirements (12 -15 hours):

A. Management Concentration (12 hours): Students choosing this option should complete MGMT 3371 and 9 hours from the courses that follow: MGMT 3361, MGMT 3372, MGMT 3383, and MGMT 4371.

B. Marketing Concentration (15 hours): Students choosing this option must complete MKTG 3381, 3383, 4381 and an additional 6 hours from the courses that follow: MKTG 3361, 3382, INTB 3363, 4362. In order to enroll in MKTG 4381 in their Senior year, students must complete 3381 and 3383 by the end of their Junior year.

IV. Completion of an approved study abroad experience or the successful completion of a modern foreign language course numbered 2302, or its equivalent.

V. Completion of electives to bring the total in School of Business courses to at least 45 credit hours.

VI. Completion of electives sufficient to bring the total credit hours outside of the School of Business to at least 60.

VII. Completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

For full admission to any School of Business major, a student must first complete the following courses with grades of C or better:

1. ACCT 1301
2. MATH 1305 or MATH 1311
3. ECON 1311
4. BAT 2301

Provisional acceptance may be granted if it is apparent that an applicant can meet the requirements for full acceptance by the end of the semester in which application is made.

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## Bachelor of Science in International Business Degree

The requirements for the Bachelor of Science in International Business degree are as follows:

I. One of MATH 1305 or MATH 1311.

II. Core business curriculum (28 hours): ACCT 1301; BAT 1101 or 1102, 2301, 2302, 3301; BUSN 3302, 4301; FNCE 3301; MGMT 2301; and MKTG 2301.

Note: ECON 1311 is prerequisite for FNCE 3301 and ECON 1312 is prerequisite for BUSN 4301. In order to satisfy these prerequisite requirements, ECON 1311 and ECON 1312 may not be taken on a pass/fail basis.

III. International Business major requirements (24 hours):

A. Required courses (15 hours): MGMT 3361, FNCE/ECON 3361, MKTG 3361, INTB 3361, INTB 4361.

B. International Business electives (6 hours):

1. At least 3 hours from INTB 3330, 3363, 3365, 4362, and/or BUSN 3340.

2. Interdisciplinary international electives: COMM 3322/HCOM 3374, ECON 3318, 3347, FNCE 3348, and INTB 3346.

C. International experiential requirement (3 hours): International Business Internship (INTB 3396, INTB 3-97 or INTB 3372) with International Business Summer Program, Madrid Program, Shanghai Policy Program, or other pre-approved internship programs.

Note: University policy requires that all students intending to study abroad have a GPA of 2.75 or above. To satisfy the experiential requirement for the major, a student must have both an approved study abroad experience and an approved international internship (a minimum of 120 hours of work experience with the sponsoring company or organization). All students are strongly encouraged to complete their international internship while they study abroad.

D. Language requirement:

Foreign Language (3301 or 3302). Students must either complete a modern foreign language course (minimum level 3301) or demonstrate fluency in a foreign language.

IV. Completion of electives sufficient to bring the total credit hours outside of the School of Business to at least 60.

V. Completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

For full admission to any School of Business major, a student must first complete the following courses with grades of C or better:

1. ACCT 1301
2. MATH 1305 or MATH 1311
3. ECON 1311
4. BAT 2301

Provisional acceptance may be granted if it is apparent that an applicant can meet the requirements for full acceptance by the end of the semester in which application is made.

# Minor in Business Administration Legal Studies

The Business Administration Legal Studies Minor is designed for students who would like to develop a practical understanding of legal theory and the rules of law applicable to public and private institutions, with emphasis on business enterprises. Students contemplating graduate studies in business, law, medicine, or other professional areas and those who intend to serve in an organizational leadership capacity would find that the Legal Studies Minor complements their major field of study. Requirements for the minor are the completion of at least 18 credit hours of courses. The following three courses are required for completion of the minor: ACCT 1301, BUSN 3302, and BUSN 3341. Additional requirements include:

I. At least one three-hour course in law focusing on business regulation: BUSN/ECON 3338, INTB 3361, ECON 3336, ECON 3339, or appropriate BUSN 3-90 or other course approved by the minor adviser.

II. At least one three-hour course in law applicable to business from a perspective other than business or economics: COMM 3362, PHIL 3453, PLSI 3351, SOCI 3350 or other law course outside of business and economics approved by the minor adviser.

III. One additional three-hour course in law from either I or II above.

Note: If a student wishes to pursue a minor in Business and a minor in Business Administration Legal Studies, the courses required by one minor cannot simultaneously be counted to fulfill the requirements of the other. Moreover, a student receiving any School of Business major may not receive a minor in Business or a minor in Business Administration Legal Studies.

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# Bachelor of Science in Business Analytics and Technology Degree

The requirements for the Bachelor Science in Business Analytics and Technology degree are as follows:

I. One of MATH 1305 or MATH 1311; and one of CSCI 1311 or 1320.

II. Core business curriculum (28 hours): ACCT 1301; BAT 1101 or 1102, 2301, 2302, 3301; BUSN 3302, 4301; FNCE 3301; MGMT 2301; and MKTG 2301.

Note: ECON 1311 is prerequisite for FNCE 3301 and ECON 1312 is prerequisite for BUSN 4301. In order to satisfy these prerequisite requirements, ECON 1311 and ECON 1312 may not be taken on a pass/fail basis.

III. Business analytics and technology major requirements (12 hours): BAT 3303, 3305; 3304, and 4301.

IV. Completion of an approved study abroad experience or the successful completion of a modern foreign

language course numbered 2302, or its equivalent.

V. Completion of electives sufficient to bring the total credit hours outside of the School of Business to at least 60.

VI. Completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

VII. For full admission to this major, a student must first complete the following courses with grades of C or better:

1. ACCT 1301
2. MATH 1305 or MATH 1311
3. ECON 1311
4. BAT 1101 or 1102

VIII. For full admission to this major, a student must first complete the following courses with grades of B or better:

1. BAT 2301
2. BAT 2302
3. BAT 3301

Provisional acceptance may be granted if it is apparent that an applicant can meet the requirements for full acceptance by the end of the semester in which application is made.

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## Bachelor of Science in Finance Degree

The requirements for the Bachelor of Science in Finance degree are as follows:

I. One of MATH 1305 or MATH 1311.

II. Core business curriculum (28 hours): ACCT 1301; BAT 1101 or 1102, 2301, 2302, 3301; BUSN 3302, 4301; FNCE 3301; MGMT 2301; and MKTG 2301.

Note: ECON 1311 is prerequisite for FNCE 3301 and ECON 1312 is prerequisite for BUSN 4301. In order to satisfy these prerequisite requirements, ECON 1311 and ECON 1312 may not be taken on a pass/fail basis.

III. Finance major requirements (24 hours):

A. Required courses (18 hours): FNCE 3352, 3362, FNCE 3351, FNCE 3361, and ACCT 3341, 3342.

B. Elective courses (6 hours): FNCE 3363, 3366, 4362, 4363, or 4366.

IV. A grade of C or higher in FNCE 3301.

V. Completion of an approved study abroad experience or the successful completion of a modern foreign language course numbered 2302, or its equivalent.

VI. Completion of electives sufficient to bring the total credit hours outside of the School of Business to at least 60.

VII. Completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

For full admission to any School of Business major, a student must first complete the following courses with grades of C or better:

1. ACCT 1301
2. MATH 1305 or MATH 1311
3. ECON 1311
4. BAT 2301

Provisional acceptance may be granted if it is apparent that an applicant can meet the requirements for full acceptance by the end of the semester in which application is made.

It is critical for students to plan their coursework carefully because many courses are fall-only or spring-only offerings. To complete the academic requirements for the B.S. degree in four years, the following guidance is provided.

Students who intend to study abroad as a part of their major requirements should plan on completing their study abroad **either prior to their junior year or during a summer term.**

1. Sophomore spring semester or junior fall semester – FNCE 3301.
2. Junior fall semester – FNCE 3301 (if not already taken) and ACCT 3341.
3. Junior spring semester – FNCE 3352, FNCE 3362, and ACCT 3342.
4. Senior fall semester – FNCE 3351/ECON 3356
5. Senior fall semester – elective FNCE 3363 (Student Managed Fund I). Prerequisites include FNCE 3352 and FNCE 3362, interview in junior spring semester.
6. Senior spring semester – FNCE/ECON 3361.

# Bachelor of Arts in Business Degree

The requirements for the Bachelor of Arts Degree with a major in Business are as follows:

I. One of MATH 1305 or MATH 1311.

II. Core business curriculum (28 hours): ACCT 1301; BAT 1101 or 1102, 2301, 2302, 3301; BUSN 3302, 4301; FNCE 3301; MGMT 2301; and MKTG 2301.

Note: ECON 1311 is prerequisite for FNCE 3301 and ECON 1312 is prerequisite for BUSN 4301. In order to satisfy these prerequisite requirements, ECON 1311 and ECON 1312 may not be taken on a pass/fail basis.

III. Completion of a second major from a department outside of the School of Business at Trinity University.

IV. Completion of six hours of electives in the School of Business.

V. Completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

For full admission to any School of Business major, a student must first complete the following courses with grades of C or better:

1. ACCT 1301
2. MATH 1305 or MATH 1311
3. ECON 1311
4. BAT 2301

Provisional acceptance may be granted if it is apparent that an applicant can meet the requirements for full acceptance by the end of the semester in which application is made.

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## Minor in Business

In addition to the degree programs offered to business majors, the School of Business offers a minor in Business to students who would like to explore the subject of business in depth but whose primary interests lie elsewhere. Requirements for the minor are the completion of at least 24 credit hours of School of Business courses. The following seven courses are required for completion of the minor: ACCT 1301, BAT 2301, 2302, BUSN 3302, MGMT 2301, MKTG 2301, and FNCE 3301\*.

In addition, one three-hour upper-division elective course within the School of Business must be taken. None of the courses used to satisfy these requirements may be taken Pass/Fail.

\*Students should note that ECON 1311 is prerequisite for FNCE 3301. In order to satisfy this prerequisite

requirement, ECON 1311 may not be taken on a Pass/Fail basis.

## Courses

### Accounting

#### ACCT-1300 Understanding the Language of Business

An introduction to financial and managerial accounting for students who are not majoring in Business, but whose future leadership roles in traditional business environments, non-profit organizations, and other sectors may require and understanding of accounting information. Students will study the development of accounting information and its use to communicate information for personal and organizational decision making. This course does not satisfy curricular requirements for students majoring in Business, nor may students majoring in business earn elective credit for this course subsequent to completion of ACCT 1301.

#### ACCT-1301 Fundamentals of Financial Accounting

An introduction to business and the basic concepts of financial accounting. The course incorporates identifying, analyzing, measuring, recording, and communicating financial information for businesses that are organized and operated for profit. Emphasis is placed on applications of these concepts to real world situations.

#### ACCT-1302 Fundamentals of Managerial Accounting

An introduction to cost and managerial accounting with special focus on the application of cost accounting techniques such as managerial planning, control, and decision making tools. A special effort is made to integrate standards of ethical conduct for management accountants throughout the course. Prerequisite: ACCT 1301

#### ACCT-1341 Capitalism, Accounting, and Accountability

The purpose of this course is to investigate the importance of financial accounting and financial accountability to Western economies and societies. The course uses readings from "Great Books" to inform discussions about modern capitalist economies and then explores the importance of accounting and accountability in the success (and failure) of organizations, economies, and empires from the 14th century to the present. The course also includes discussions related to corporate social responsibility and sustainability. School of Business majors may not earn business elective credit for this course.

#### ACCT-2141 The Accounting Profession and Professionalism



An overview of the accounting profession, with emphasis on areas of practice, professionalism, and ethical norms. Must be taken on a pass/fail basis. (Offered every Fall.) Corequisite: ACCT 3341 and junior standing, or consent of the instructor.

### ACCT-3142 Introduction to Oil and Gas Accounting

The course focuses on the basic vocabulary, accounting, and reporting practices related to exploration, acquisition, development, and production of oil and gas resources. Must be taken on a pass/fail basis. (Offered every Spring.) Corequisite: ACCT 3342 and junior standing, or consent of the instructor

### ACCT-3341 Intermediate Financial Accounting I

A comprehensive study of the conceptual bases and standards of financial accounting. The course focuses on analyzing transactions and internal events in terms of current accounting theory and applying this theory in financial reporting. Prerequisites: ACCT 1301 and Junior standing or consent of instructor.

### ACCT-3342 Intermediate Financial Accounting II

A continuation of ACCT 3341 with emphasis on accounting for shareholders' equity, debt securities, investments, pensions, leases, and other contemporary accounting topics. Prerequisite: ACCT 3341.

### ACCT-3343 Introduction to Federal Income Tax

An introduction to federal income tax law, primarily as it applies to individuals. Emphasis is placed on the various facets of calculating tax liability, the conceptual and theoretical bases of tax law, and practical problems encountered in its application. Prerequisites: ACCT 1301 and Junior standing.

### ACCT-3-90 Studies in Accounting

Designed for students wishing to continue the study of accounting beyond regularly offered courses. Credit from one to six hours. No more than a total of six hours credit may be earned in 3-90 courses in business administration. Prerequisites: Consent of instructor and Junior standing.

### ACCT-4344 Auditing

A study of accounting attestation standards and procedures. Topics include audit objectives, ethics, auditor's legal liability, generally accepted auditing standards, audit planning, and internal audit functions. Prerequisite: ACCT 3342.

### ACCT-4097 Accounting Internship

The accounting internship is a structured full-time eight-week internship under the supervision of accounting professionals in either private or public practice. This not-for-credit internship requires employer documentation of the internship objectives and nature of work assignments, submission of employer intern evaluations, and a summary memorandum from the intern at the conclusion of the internship period. Course must be taken on a Pass/Fail basis. Prerequisite: Senior Standing, major in accounting and approval of the instructor.

### ACCT-4397 Accounting Internship

The accounting internship is a structured full-time eight-week internship under the supervision of accounting professionals in either private or public practice. This not-for-credit internship requires employer documentation of the internship objectives and nature of work assignments, submission of employer intern evaluations, and a summary memorandum from the intern at the conclusion of the internship period. Course must be taken on a Pass/Fail basis. Prerequisite: Senior Standing, major in accounting and approval of the instructor.

### ACCT-4697 Accounting Internship

A supervised internship where the student works with an accounting or business firm learning accounting procedures and practices. The internship will normally be completed by working for an organization on a full-time basis over a period of eight weeks during the spring semester of the senior year. Must be taken on a Pass/Fail basis. Prerequisite: Senior standing.

## Business

### BUSN-1359 Professional Ethics

A critical Examination of ethics and ethical issues involved in professional life. Typical topics will include the following: ethical theory, theory of justice, professional codes of conduct, corporate responsibility, harassment policy, affirmative action, the moral status of animals, experimentation using animal and human subjects, the physician-patient relationship, reproductive ethics, and health care policy. (Also listed as PHIL 2359). PHIL 1354 and BUSN 2359 may not both be taken for credit.

### BUSN-2101 Corporate Social Responsibility and Human Values

This course offers a perspective on corporate social responsibility, with a focus on human values and business ethics. The course will include an opportunity to meet with CEOs and representatives of several businesses and will examine the motivations for responsible corporate governance.

### BUSN-3302 Legal Concepts of Business I

Studies the American legal system, principles of the law of contracts, negotiable instruments, sales, and business

ethics. Prerequisite: Sophomore Standing

### BUSN-3311 Organizational Communication

Studies the theory and practice of communication within organizations. Includes the fit of communication into organizational theory; communication climate and cultures; leadership and management styles; information networking; and the diagnosis and evaluation of communication problems. (Also listed as HCOM 3362.)

### BUSN-3313 The American Corporation

This course acquaints the student with organization theory, corporate decision-making, and the role of the corporation in society. Contemporary corporate issues are discussed and analyzed through readings and the application of fundamental principles to case studies. (Also listed as ECON 3362) Prerequisite: ECON 1311

### BUSN-3315 Iceland - Its Unique Geological, Economic and Cultural History

This course will expose students to the unique economic, geologic, and cultural history of Iceland. The economic aspects will focus on the role of financial markets and monetary institutions in economic booms and crashes using Iceland as a case study, possible solutions to public good problems such as the Icelandic fishing quota, business practices which often prioritize protection of the environment and social responsibility, and the role of international trade in development of a small country. The geological history will emphasize Iceland's plate tectonic setting, volcanism, glacial history and related hazards, geothermal energy, and the effects of climate change. The cultural portion will explore the fundamental role of literature in a country with virtually no illiteracy, and the role of the sagas in the transmission of culture, language, and the law in the country with the oldest parliament in the world. (Offered every other year).

### BUSN-3338 Government Regulation of Business

Economic analysis of direct government regulatory activity. The course first explores how regulation arises from the political process. These insights, and the tools of microeconomic theory, are then applied to analyze public policy in such fields as electricity, telecommunications, broadcasting, transportation, and safety. (Also listed as ECON 3338). Prerequisite: Three hours of upper division Economics, or consent of instructor.

### BUSN-3340 Haciendo Negocios En Latinoamerica (Doing Business in Latin America)

This course is both a language and an applied business course. On the language part, it is intended to increase the Spanish proficiency in reading, writing, and speaking. The other aspect of the course includes a thorough understanding of cultural, political, and economic aspects of the Latin American business environment. Moreover, the course will immerse the student in the intricacies of exporting to, importing from, establishing a new business in, or operating a foreign branch in a Latin American country. Prerequisites: ECON 1311, Spanish proficiency, and consent of instructor. (Also listed as LAC 3340.)

## BUSN-3341 Legal Concepts of Business II

Provides the principles of the law of business organizations and regulation; agency, partnerships, corporations, property, debtor-creditor rights, bankruptcy; additional topics include trusts, wills, business and professional responsibility. Prerequisites: BUSN 3302 and Junior standing, or consent of instructor.

## BUSN-3344 Economic and Business History of the United States to 1865

A study of the development of American business and the economy through the U.S. Civil War. (Also listed as ECON 3344 and HIST 3338). Prerequisites: ECON 1311 and 3 hours of U.S. history or consent of instructor.

## BUSN-3345 Economic and Business History of the United States Since 1865

A study of the development of American business and the economy from the U.S. Civil War to the present. (Also listed as ECON 3345 and HIST 3361). Prerequisites: ECON 1311 and 3 hours of U.S. history or consent of instructor.

## BUSN-3355 Entrepreneurship and Venture Planning

This course is designed to provide a practical, comprehensive, basic understanding of entrepreneurship. The process is explored from the inception of an idea through exit strategies. Emphasis is placed on the development of a business plan with focus on legal structure, accounting, business ethics, marketing and finance. Prerequisites: Admission to the major in Business Administration, completion of at least 15 hours of the core curriculum in Business Administration, Junior standing, and consent of instructor.

## BUSN-3367 Comparative Views of Modern China

This course represents an overview of the most important economic relationship of the twenty-first century. The global financial crisis that started in 2008 revealed just how much the strategic relationship between China and the United States represents the heart of the world's economy. China has recently surpassed Japan to become the world's second largest economy and America's third largest commercial partner. The rise of China has brought about a reorganization of the global economy and the international balance of power. This new world order carries challenges and opportunities. China remains a communist country with a significant legacy of a command economy. It is also a market economy. Understanding this mixture - capitalism with Chinese characteristics or the Chinese variety Capitalism - is the major aim of this course. We also cover topics relevant to the economic relationship between China and the USA, including international trade and the balance of trade, the Chinese currency system, the growth of China and its growing influence in the international sphere. (Also listed as ECON 3367, CHIN 3367, and URBS 3367).

## BUSN-3-90 Studies in Business

Designed for students wishing to continue the study of business beyond areas offered in regular classroom work.

Credit from one to six hours. No more than a total of six hours credit may be earned in 3-90 courses in business administration. Prerequisites: Consent of instructor and Junior standing.

### BUSN-3-97 Internship in Business Administration

The Business internship is to be a structured and supervised professional work experience with an accepted employer in the private, public, or non-profit sector. To be recognized, the experience must be preapproved and must include specific learning objectives, weekly and final reflections from the intern, and evaluations from the employer. An internship is typically done by a student who has attained sufficient preparation in an academic field. The experience may be paid or unpaid. Variations in credit according to the work performed, from 0 to 6 hours per semester. May be repeated for a maximum of 6 hours credit. Must be taken on a Pass/Fail basis. Prerequisite: 15 hours of Core Business Curriculum, Consent of Internship Coordinator and appropriate School of Business Department Chair.

### BUSN-4130 Quanqiu Shangwu Wenhua-Zhong-Mei Jiaodian (Global Business Culture)

A companion course to INTB/CHIN 3330 which examines the diverse business culture in China in comparison to that in other countries, particularly in the United States. This course must be taken concurrently with INTB/CHIN 3330 and will be taught entirely in Chinese. Students must have the ability to write and converse in Chinese. (Also listed as CHIN 4130 and LAC 4130) Prerequisites: Senior Standing, CHIN 3302 or the equivalent, and Consent of Instructor Corequisite: INTB/CHIN 3330

### BUSN-4301 Business Policy and Strategy

A study in which decision making is emphasized through the analysis of company operations in policy formulation and administration. A course in which the student can apply knowledge acquired in other courses to business problems. Prerequisites: Completion of all other Business Core courses, ECON 1312, and Senior standing.

### BUSN-4364 Internationalizing Intellectual Property

Examines theories and strategic significance of intellectual property within a global environment. Intellectual property such as patents, marks, industrial designs, and trade secrets are examined with an emphasis placed upon strategic and managerial intellectual property issues between the United States and China. Course taught in English. (Also listed as CHIN 4364). Prerequisites: Senior standing and Consent of Instructor

### BUSN-3366 The Globalized Economy: America and Japan in the 21st Century

The course examines issues such as the interconnection between politics and economics, globalization, multinational corporations, tariffs, free trade agreements and the World Trade Organization, economic development, world financial market crisis, East Asian socioeconomic issues, the Japanese economy, the creation of wealth, and rising economic inequality. All of these issues are essential for an understanding of life in the 21st century, and they are all particularly salient in Japan and the United States of America. The course will also

compare marketing and management paradigms in both countries, as well as a description of Japanese lean manufacture production models. (Offered every year). Prerequisite: Consent of Instructor

## Business Analytics and Technology

### BAT-3301 Operations Management

Provides a broad view into the scope of work, tools, and techniques, both qualitative and quantitative, that the modern Operations Manager should master, with application to both goods and services. Topics include Operations Strategy, Forecasting, Facility Location and Layout, Project Management, Capacity Planning, Inventory Management, Quality Management, Work Design, and current trends in Operations such as Six Sigma and Lean Manufacturing. Prerequisite: BAT 2301, BAT 1101 and BAT 2302

### BAT-3303 Business Analytics

In this course we explore how to solve modern business problems using analytical and computational methods that require sophisticated skills in quantitative analysis as well as in data storage, retrieval and manipulation. We apply diverse analytical approaches to issues from different functional areas which require an integrative look at the problem solving process. (Offered every other Fall.) Prerequisite: BAT 1101, BAT 2301, BAT 2302 and one of CSCI 1311 or CSCI 1320

### BAT-3304 Lean Process Improvement

Grounded in practices developed by Toyota Motor Corp., "Lean" is a system of tools, techniques and philosophies that seek to relentlessly eliminate waste along the value added process in the creation of goods or services. Lean is the "de facto" benchmark in production systems, and it is becoming so for administrative processes and health care management. Through this course this will familiarize the student with the evolution of production systems, provide them with an advanced tool set for the implementation of Lean across different industries and allow the student to critically compare and contrast Lean with other production systems and philosophies. (Offered every Fall) Prerequisites: BAT 3301 or Consent of Instructor

### BAT-3305 Machine Learning

The study and implementation of machine learning algorithms to solve problems that involve big data sets in business analytics and related applications. Topics include logistic regression, k-nearest neighbors, linear discriminant analysis, classification trees, k-means clustering, principal component analysis, text mining and sentiment analysis among others, as well as how to choose the best analytic strategy in different business scenarios. (Offered every Spring.) Prerequisite: BAT 3303 Business Analytics

### BAT-3394 The Japanese Production System in Context

We examine the evolution of production systems from the Middle Ages to present times, focusing on the Lean paradigm, or Toyota Production System (Toyota Seisan Hoshiki). We will learn the basics of production management, and we will study, analyze, compare, and contrast Lean with other older and newer systems and explore the social, cultural, and philosophical context that makes Lean the current benchmark in production quality and efficiency. As part of the coursework, students will research some aspect of Lean and produce a research report and presentation. (Offered occasionally.)

### BAT-3-97 Business Analytics Internship

The Business Analytics and Technology internship is to be a structured and supervised professional work experience with an accepted employer in the private, public, or non-profit sector. To be recognized, the experience must be preapproved and must include specific learning objectives, weekly and final reflections from the intern, and evaluations from the employer. An internship is typically done by a student who has attained sufficient preparation in an academic field. The experience may be paid or unpaid. Variations in credit according to the work performed, from 0 to 6 hours per semester. May be repeated for a maximum of 6 hours credit. Must be taken on a Pass/Fail basis. (Offered every semester). Prerequisite: Consent of internship coordinator and Finance and Decision Science department chair.

### BAT-4301 Consulting Experience in Business Analytics and Technology

This is an experiential course in which teams of students conduct consultancy projects at the premises of host organizations. Teams are guided by one or more faculty members and are evaluated by both faculty and the host organizations. Topics must be strongly related to current challenges in business analytics, technology, operations, or information systems. (Offered every Fall.) Prerequisites: BAT 3304 and BAT 3305

### BAT-1101 Spreadsheet Based Modeling and Data Analysis

Spreadsheet software widely used to manipulate, explore and analyze data across enterprise. This hands-on course will sharpen your analytical and software skills and prepare you to use spreadsheet software in a variety of business scenarios. (Offered every other Spring).

### BAT-1102 Intermediate Spreadsheet Modeling and Analysis

Spreadsheet software is widely used to manipulate, explore and analyze data across the enterprise. This hands-on course will provide an in-depth exploration of intermediate and some advanced Excel functionality. (Offered every semester). Prerequisite: BAT 1101 or consent of instructor

### BAT-2301 Statistics for Business and Economics

Applications of statistical techniques to business and economics. Sampling, tests of hypotheses, regression and other statistical techniques and their implementation using modern statistical software. (Also listed as ECON 2301)(Offered every semester)

## BAT-2302 Fundamentals of Information Systems

Systems theory, information quality, decision making, and the organizational role of information systems are introduced. Information technology including computing and telecommunications systems, are stressed. Concepts of organizations, information systems growth, and process improvements are introduced.

## BAT-3302 Data Science

Storage, retrieval and analysis of data sets, with emphasis in "data wrangling" and the application of specialized software, computational techniques and algorithms to practical scenarios. (Offered occasionally.) Prerequisite: BAT 2301, BAT 2302

## BAT-3390 Special Topics

From time to time, special topics courses may be offered in the area of Business Analytics and Technology. The contents of the course will vary depending on the topic. This course may be taken up to two times, as long as the course content changes. (Offered occasionally.) Prerequisite: Consent of Instructor

# Finance

## FNCE-1300 Personal Finance

This course cannot be used to satisfy any of the requirements for a Business degree. This course addresses the major personal financial planning issues that individuals and households face, with an overview that includes all aspects of personal financial management including budgeting, retirement planning, life and health insurance, income taxes, auto and real estate transactions, estate planning and personal investments. Topics also include establishing savings goals, using banking, credit, and other financial services, tax planning, making good investments, and comparing insurance products.

## FNCE-3301 Fundamentals of Financial Management

Fundamentals of financial decision making in organizations. Topics include financial planning, managing cash flows, raising and allocating funds, cost of capital, capital budgeting and others. (Offered every semester). Prerequisites: ACCT 1301, ECON 1311 and BAT 2301

## FNCE-3348 International Monetary Systems

A study of the principles and practices of foreign exchange, international money markets, the balance of payments, payments adjustment mechanism and the national policies for achieving both domestic and international objectives. Coverage includes the description and history of the relevant national and international institutions.



Practice is provided in reading and understanding recent international economic events and current policy issues. (Also listed as ECON 3348). Prerequisites: ECON 1311 and ECON 1312

### FNCE-3351 Financial Institutions and Markets

Analytical investigation of the structure, efficiency, and regulation of financial markets and institutions. Topics include determination of the level and structure of interest rates, asset valuation and the flow of funds between markets, theory and practice of financial intermediation, and the social utility of the financial sector. (Also listed as ECON 3356.) Prerequisites: Junior standing and ECON 1311, 1312

### FNCE-3352 Investment Principles and Analysis

Analysis of common stock, bonds, options, and futures. Topics include financial markets, valuation of securities, technical analysis, market efficiency, and portfolio theory. Prerequisites: FNCE 3301 and Junior standing.

### FNCE-3361 International Finance

This course emphasizes the study of the global exchange rate and associated derivatives markets with particular emphasis on foreign risk hedging; the study of financial equilibrium relations and their effects on the international capital markets, and the potential arbitrage opportunities that result in the absence of equilibrium; and the use of case studies to illustrate the application of theoretical tools on the multinational corporate environment. (Also listed as ECON 3361.) Prerequisites: FNCE 3301 or consent of instructor.

### FNCE-3362 Financial Management and Policy

Advanced study of financial theories and practices. Emphasis on case studies to develop analytical thinking about problems faced by business firms. Topics include capital budgeting, risk analysis, leasing, bankruptcy, and mergers. Prerequisites: FNCE 3301 and ACCT 3341

### FNCE-3363 Student Managed Fund I

Combines study of the security analysis and portfolio management with practical demands of hands-on money management. Provides opportunity to invest university endowment funds. Topics include economic, industry, and company analysis; economic and financial forecasts; valuation models; portfolio theory; investment philosophy; ethics in investing; capital market performance history; managing endowment funds; and portfolio performance measurement. (Offered every Fall) Prerequisites: FNCE 3301, 3352, 3362 and consent of instructor.

### FNCE-3366 Professionalism and Ethics in Finance

This course exposes students to a framework for making ethical financial decisions and to the professional culture of Finance including professional etiquette. Students apply abstract ethical concepts to real-world financial decisions and discuss the personal and professional penalties associate with failure to maintain the highest

ethical standards. (Offered every Fall.)

### FNCE-3-90 Studies in Finance

Designed for students wishing to continue the study of Finance beyond areas offered in regular classroom work. Credit from one to six hours. No more than a total of six credit hours may be earned in 3-90 courses in Business Administration. Prerequisites: FNCE 3301, consent of Instructor, and Junior Standing

### FNCE-3-97 Finance Internship

The Finance and Decision Sciences internship is to be a structured and supervised professional work experience with an accepted employer in the private, public, or non-profit sector. To be recognized, the experience must be preapproved and must include specific learning objectives, weekly and final reflections from the intern, and evaluations from the employer. An internship is typically done by a student who has attained sufficient preparation in an academic field. The experience may be paid or unpaid. Variations in credit according to the work performed, from 0 to 6 hours per semester. May be repeated for a maximum of 6 hours credit. Must be taken on a Pass/Fail basis. (Offered every semester). Prerequisite: 15 hours of Core Business Curriculum, Consent of internship coordinator and Finance and Decision Science department chair.

### FNCE-4362 Derivatives

Derivatives are financial assets that are now essential tools for investors, corporations and financial institutions to manage risk. This course represents advanced study in the way that these assets are developed and marketed, how they operate, and how they are used. Special emphasis is given to the understanding of how markets come to price these sometimes complicated financial assets. This course provides tools necessary to manage risk, and to value and utilize derivatives in a variety of contexts. Prerequisites: FNCE 3352 - Investments

### FNCE-4363 Student Managed Fund II

A continuation of FNCE 3363. Mentoring and leadership of FNCE 3363 students. Continued and advanced student of security analysis and portfolio management with practical demands of hands-on money management. Provides opportunity to invest university endowment funds. Advanced investments and portfolio management related learning experience tailored to individual student interests. Prerequisites: FNCE 3301, 3352, 3363, and consent of instructor.

### FNCE-4366 Advanced Financial Management

A capstone corporate finance class focusing on advanced financial management decision-making in capital budgeting, dividend policy, capital structure, and corporate restructuring. The format of the course is seminar style in that the majority of the classes will be interactive and case-based. (Offered every Spring.) Prerequisites: FNCE 3301 and FNCE 3362

# International Business

## INTB-2301 International Business Environment

This course focuses on an issue that is of fundamental importance to the study of international business: external relationships involving multinational firms. It provides participants with a theoretical and empirical understanding of how these relationships cause multinationals to behave in certain ways and what the consequences of particular courses of action might be. The course is designed to prepare students, in an integrated setting, to assess the interactions between multinational organizations and institutions (e.g. International Trade Commission, World Trade Organization). It helps participants develop awareness in the process of assessing corporate risks and opportunities to survive and grow in global markets. (Offered every Fall).

## INTB-3330 Global Business Culture

This course aims to provide students with a critical and comprehensive understanding of CEO behaviors and cultural reasoning behind their success and/or failure. Emphasis is on comparative analysis of the business culture between China and the US, and related global perspectives. Extensive case applications focus on international CEO comparisons (e.g. American, Chinese, Latin American CEOs). This is a course to prepare students to interact effectively with cross-cultural business partners when doing international business. (Also listed as CHIN 3330.) (Offered every Fall). Prerequisites: Junior standing and 6 hours of Business Administration or consent of instructor.

## INTB-3346 La Economia Espanola Y la Union Europea (The Spanish Economy and the European Union)

An examination of Spain's economic development and its position within the European Union. The business, economic, and political transformation of Spain from a struggling nation with an authoritarian regime to an economic power with an open and democratic society are studied. The course also examines the development of European Union, with a special focus on its influence on the Spanish business environment. The experiential component of the course includes visits to businesses, government agencies, and NGO's in Spain. (Also listed as ECON 3346, SPAN 3346, and LAC 3346). (Offered once a year). Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of the instructor.

## INTB-3361 International Business Law

Surveys the law of international trade and investment, with an emphasis on: comparative features of the world's various legal systems; international sales of goods and services; U.S. and international trade law and practice, documentary sales and letters of credit; the law of international organizations such as the World Trade Organization (WTO) and the European Union (EU); bilateral and multilateral treaties and international agreements such as North American Free Trade Agreement (NAFTA) and the Trans Pacific Partnership (TPP); laws and regulations governing foreign direct investment (FDI), agency and distribution agreements, and protection of

intellectual property rights (IPR's) at the international level. (offered every Spring). Prerequisite: BUSN 3302 or consent of instructor.

### INTB-3363 International Business Research

This course is offered to encourage undergraduate research. It provides a systematic examination of research as a science and the diverse methods available to conduct international business research, including coverage of both qualitative and quantitative techniques. Emphasis is upon fieldwork (e.g. interviews and surveys in China, US, Latin America or Europe) to collect original data, conduct analysis and interpret results within the context of international business. (Offered once a year). Prerequisite: Junior Standing and 15 hours of business core courses, or Consent of Instructor.

### INTB-3365 International Innovation

This course focuses on significant inventions and their patents, and their impact on society, industries, companies, and individual inventors. It also examines how patent systems across nations work to promote and undermine inventive activities. Case studies and data analysis form the main thrust to enhance learning by examining historic landmarks and contemporary breakthroughs. Participants will also examine how patented inventions are often accompanied by disputes. Participants in this course will also have opportunities to simulate a licensing contract. (Offered every Spring). Prerequisites: junior standing and 15 hours of business core courses, or consent of the instructor

### INTB-3372 Practica profesional en Espana (Internship in Spain)

A supervised summer internship in Spain. Students enrolled in BUSN 3372 will serve as interns with various firms, trade groups, governmental agencies, or public interest groups where they will work and gain experience related to the Spanish economy and business world. The nature of the student's responsibilities will vary with the internship involved and be subject to the approval of the supervising faculty member. (Also listed as ECON 3372, SPAN 3372, and LAC 3372). (Offered once a year). Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of instructor.

### INTB-3-96 International Business Internship

The International Business internship is to be a structured and supervised professional work experience with an accepted employer in the private, public, or non-profit sector. To be recognized, the experience must be preapproved and must include specific learning objectives, weekly and final reflections from the intern, and evaluations from the employer. An internship is typically done by a student who has attained sufficient preparation in an academic field. The experience may be paid or unpaid. Variations in credit according to the work performed, from 0 to 6 hours per semester. May be repeated for a maximum of 6 hours credit. Must be taken on a Pass/Fail basis. (Offered every semester). Prerequisite: 15 hours of Core Business Curriculum, Consent of internship coordinator and Business Administration department chair.

## INTB-3396 Internship in International Business

This is a supervised, internationally oriented internship. Students registered for this course will serve as interns, under a professional supervisor, in international firms, trade organizations, or governmental/non-governmental agencies to gain experience related to a country other than their home country. The interns' responsibilities should be international business in nature and be subject to the approval of the academic supervisor. This course must be taken on a Pass/Fail basis. (Offered every semester). Prerequisites: Junior standing, completion of 15-hour business core courses, and consent of the instructor

## INTB-4361 International Business Strategy

This course examines how multinational enterprises strategize in the global marketplace. Participants will examine global business, competitive and corporate strategies and their effect on firm performance. This is a core course in international business to develop expertise of internationalization. Participants will also be guided to formulate strategies for leading multinationals in the world. (Offered every Fall). Prerequisites: Senior standing and 18 hours of business core courses, or consent of the instructor

## INTB-4362 International Branding

This course centers on the strategic role that corporate and product brands have played in the success or failure of multinational firms. Emphasis is on how they are managed and strategized globally. Participants will have opportunities to examine many famous brands in the world in a comparative manner (e.g., brands from the U.S., China, and Latin America). They will also be guided to design and improve their own brands in the process of learning. Case studies and brand valuation are throughout the semester. (Offered every Spring). Prerequisites: Senior standing and 18 hours of business core courses, or consent of instructor.

# Management

## MGMT-2301 Management of Organizations

This course studies the management activities and processes required to successfully attain organizational goals. It includes an introduction to the principles of decision making, leadership, motivation, conflict resolution, managerial ethics, and social responsibility. Emphasis is placed on both theory and practical application in order to prepare students for future managerial roles.

## MGMT-3311 Labor Economics and Labor Relations

For description see ECON 3329.

## MGMT-3361 International Management

The global marketplace, its structure and dynamics, significant economic, political and cultural influences, and global resource flows will be studied from the perspective of the management strategist. Within this context, strategy formulation and implementation, the creation of an optimal portfolio of strategic business units, and the analysis of global operating and financial flows will be studied, assuming the objective of maximizing shareholder value. Prerequisite: Junior standing or consent of instructor.

### MGMT-3371 Human Resources Management

Examines by discussion and experiential learning techniques the major activities associated with the area of Human Resource Management: equal employment opportunity, personnel planning and selection, training and management development, employee discipline, labor-management relations, and current topics such as AIDS and substance abuse in the workplace. Special emphasis is placed on practical application of this knowledge to general management in all types of organizations.

### MGMT-3372 Organizational Behavior

Examines the nature of interpersonal and group relations in work organizations using behavioral science and modern management thought. A study of organizations as socio-technical systems with emphasis on communication, motivation, leadership, conflict resolution, and organizational development. Prerequisites: MGMT 2301 and Junior standing.

### MGMT-3383 Management of Health Care Organizations

This course provides the unique knowledge and skills necessary to understand and effectively manage individuals and groups in challenging health care organizations such as hospitals, medical group practices, and nursing homes. The focus is on developing a theoretical and practical approach to managerial functions as related to dealing with health care professionals and workers, developing a conceptual understanding of the health care system in which the organization operates, and understanding the relationship between the organization, its regulatory environment and the reimbursement system. Case studies are used to provide real-world applications relevant to health care management. (Also listed as HCAD 3383) Prerequisite: Junior Standing.

### MGMT-3-90 Studies in Management

Designed for students wishing to continue the study of management beyond areas offered in regular classroom work. Credit from one to six hours. No more than a total of six hours credit may be earned in 3-90 courses in Business Administration. Prerequisites: Consent of instructor and Junior standing.

### MGMT-3-97 Management Internship

The Management internship is to be a structured and supervised professional work experience with an accepted employer in the private, public, or non-profit sector. To be recognized, the experience must be preapproved and must include specific learning objectives, weekly and final reflections from the intern, and evaluations from the

employer. An internship is typically done by a student who has attained sufficient preparation in an academic field. The experience may be paid or unpaid. Variations in credit according to the work performed, from 0 to 6 hours per semester. May be repeated for a maximum of 6 hours credit. Must be taken on a Pass/Fail basis. (Offered every semester). Corequisite: 15 hours of BADM core Prerequisite: 15 hours of Core Business Curriculum, Consent of internship coordinator and Business Administration department chair.

## MGMT-4371 Strategic Management

A study of the formulation and implementation of corporate level strategies such as mergers and acquisitions, retrenchment, and entrepreneurship. The course also studies current trends in the business world and features presentations by local executives. Prerequisite: Senior standing or consent of instructor.

# Marketing

## MKTG-2301 Principles of Marketing

Introduction to the marketing function within an organization. This course examines the relationship of the marketing process and the broader aspects of the economic, legal, technological, and competitive environments. Coverage includes those strategies associated with product planning, pricing, promotion, distribution, consumer behavior, and marketing research.

## MKTG-3361 International Marketing

Examination of the international marketing environment from the perspective of a marketing manager. Includes the study of the nature of and problems and opportunities in the global marketplace. Strategic application of marketing principles to compete effectively in world markets. Prerequisites: MKTG 2301 and Junior standing, or consent of instructor.

## MKTG-3381 Consumer Behavior

The study of consumer decision making and the influence upon those decisions. Examines the behavior of consumers throughout the range of prepurchase, purchase, and post purchase activities with reference to both internal psychological processes and external environmental influences on behavior. Prerequisites: MKTG 2301 and Sophomore standing.

## MKTG-3382 Integrated Marketing Communications

A study of the integrated marketing communications of organizations with an emphasis on coordination of effort among various advertising and promotional tools to create brand contacts that are relevant and consistent over time. This course views IMC as a consumer-centric strategic marketing process specifically intended to ensure

that all messaging and communications efforts are unified and results oriented across all channels Prerequisite: MKTG 2301 and Junior standing.

### MKTG-3383 Marketing and Business Research

The application of both behavioral and quantitative research to business problems. Topics include: research design, information sources, measurement techniques, questionnaire design, sampling, data analysis, and applications within the marketing mix. (Offered every year) Prerequisites: MKTG 2301; one of BAT 2301, MATH 1320, PSYC 2401, SOCI 3360, ANTH 3360, or URBS 3360; and sophomore standing.

### MKTG-3-90 Directed Studies in Marketing

Supervised independent study designed for advanced students wishing to continue the study of marketing beyond areas offered in regular classroom work. Credit from one to six hours. No more than a total of six hours credit may be earned in 3-90 courses in business. May be repeated when topics vary. Prerequisite: MKTG 2301, and junior standing, and consent of instructor

### MKTG-4381 Marketing Management

The role of marketing in business and society. The management of the marketing function and its interrelationship with other functional areas within the organization. Problems, decisions and the decision-making process of marketing managers. Strategy formation, execution, and control. (Offered every year). Prerequisite: MKTG 2301, 3381, 3383, and senior standing.

### MKTG-4385 Marketing Consultancy

The marketing consultancy course offers students direct and meaningful experience in tackling real-world consulting problems and projects. The class is oriented towards real-time problems and situations encountered by actual small business and non-profit organizations. The nature of each client project may differ, but clients are selected based on opportunities to integrate various aspects of marketing discipline, such as branding, strategic market planning, and integrated marketing communication (Offered every Spring.) Prerequisite: Consent of Instructor - Students must apply to be accepted to enroll in this course

### MKTG-3-91 Applied Marketing

Supervised project designed for students wishing to gain experience in applied research in marketing. Credit from one to six hours. May be repeated for different projects. (Offered occasionally). Prerequisites: Consent of instructor

### MKTG-3-92 Special Topics in Marketing

Classroom based instruction on topics not normally covered in other course offerings. Credit from one to six hours. May be repeated when topics vary. (Offered occasionally). Prerequisites: Consent of instructor



## MKTG-3-97 Internship in Marketing

The Marketing internship is to be a structured and supervised professional work experience with an accepted employer in the private, public, or non-profit sector. To be recognized, the experience must be preapproved and must include specific learning objectives, weekly and final reflections from the intern, and evaluations from the employer. An internship is typically done by a student who has attained sufficient preparation in an academic field. The experience may be paid or unpaid. Variations in credit according to the work performed, from 0 to 6 hours per semester. May be repeated for a maximum of 6 hours credit. Must be taken on a Pass/Fail basis. (Offered every semester). Corequisite: 15 hours of BADM core Prerequisite: Consent of internship coordinator and FDS department chairs

## Graduate Courses

### ACCT-5341 Accounting Theory

This course will contrast financial and social accounting issues worldwide. It will review the history of accounting and the trend toward increasingly complex capital markets and financial contracts. Positive theories as to why certain practices evolved and normative theories regarding idealized practices will be contrasted.

### ACCT-5342 Accounting Information Systems

This course investigates the components of accounting information systems (AIS) and dynamics of change in those systems. Focus is placed upon changing computer and networking technologies in modern accounting information systems.

### ACCT-5343 Seminar in Advanced Federal Tax

Beginning with a discussion of the sources of tax law and the basics of tax research methodology, the course will continue with coverage of corporation and shareholder taxation, taxation of partners, income taxation of trusts and estates, and the federal donative transfer taxes. Additional topics will include tax law administration, nonprofit entities, and penalty taxes.

### ACCT-5344 Advanced Auditing: Professional Standards and Practices

This course utilizes authoritative pronouncements, internet resources, case studies, and relevant academic literature to provide an in-depth study of the various professional standards that shape the audit process including those related to audit procedures, reporting responsibilities, and fraud.

### ACCT-5345 Advanced Managerial Accounting

This course develops modern management accounting information systems for decision making and control in complex organizations. The topics include cost-volume-profit analysis, linear programming, regression analysis, activity-based costing, target costing, quality costing, and strategic cost management.

### ACCT-5346 Advanced Financial & Nonprofit Accounting

This course introduces students to the accounting standards for business combinations along with applicable accounting and reporting standards. Consolidated financial statements are the major focus of the course. Foreign currency concepts are studied including foreign currency transactions, forward exchange contracts and translation under the latest rules. Nonprofit accounting focuses on accounting for universities, hospitals, and government.

### ACCT-5347 International Accounting

An analysis of the issues involved in accounting for multinational corporations, including environmental influences, foreign currency translation, management accounting, and international accounting.

### ACCT-5349 Seminar in Ethics and Professional Responsibility

This course provides an in-depth analysis of ethical theory and ethical decision-making in practice, with a focus on issues that are likely to be faced by professional accountants.

### ACCT-5390 Selected Topics in Accounting

Study of Selected Topics in accounting. May be repeated for up to 6 semester hours on different topics.  
Prerequisites: Graduate Standing

### ACCT-5097 Accounting Internship

A structured part-time one semester or summer internship under the supervision of accounting professionals in either private or public practice. This not-for-credit graduate internship requires employer documentation of the internship objectives and nature of work assignments, submission of employer intern evaluations, and a summary memorandum from the intern at the conclusion of the internship period. Course must be taken on a Pass/Fail basis. Prerequisite: graduate standing and approval of the instructor. (Offered every semester)

### BUSN-5390 Seminar in Business

Study of selected topics in business. May be repeated for up to six semester hours on different topics.

### FNCE-5351 Financial Analysis for Decision Making

Cash flows between the firm and financial markets; financial value and its determinants; managing working

capital; analyzing and planning financial performance; cost of capital and capital budgeting. Prerequisite: Three-hour accounting course.

### MGMT-5371 Human Resources Management

Critical analysis of the theoretical base and current developments related to personnel activities in organizations. Recruitment and selection, remuneration and incentives, performance appraisal, and employee relations are discussed in relation to current social trends and government regulations.

### MGMT-5372 Conflict Management

A study of conceptual, analytical, and communication techniques instrumental to the management of chronic and acute conflicts in a wide variety of settings. Principles and strategies of negotiation and mediation are introduced through case studies.

### MIS-5381 Database Management

This course is a broad overview of the business side of the database design and management processes. This course will familiarize students with the issues, processes, and skills necessary to align database development to a business need. This course will help the student understand the key elements of a database development project and the methods used by systems analysts, such as data, file and object structures, logical design, physical design, and implementation of a Database Management System. Prerequisite: Graduate Standing or permission of instructor.

### MIS-5391 Knowledge Management

This course is a survey of the principles and processes of knowledge management. This course will familiarize students with the issues that a business must address in facilitating the flow of knowledge from those in an organization who have knowledge to those who need it. This course will help the student understand key elements of the knowledge management life cycle such as knowledge creation, storage, transfer, and application; knowledge system tools; and ethical, legal, and managerial issues. Prerequisite: Graduate Standing or permission of instructor.

### MKTG-5390 Seminar in Marketing

Study of selected topics in marketing. May be repeated for up to six semester hours on different topics.

# Sport Management

## Faculty

[Carolyn Becker, Ph.D.](#) , Professor, Psychology

[Jennifer Jacobs Henderson, Ph.D.](#) , Professor, Communication

[Rita Drieghe Kosnik, Ph.D.](#) , Professor, Business Administration

[John McGrath, Ph.D.](#) , Professor, Human Communication and Theatre

[Dominic G. Morais, Ph.D.](#) , Assistant Professor, Business Administration

[Jacob K. Tingle, Ed.D.](#) , Assistant Professor of the Practice of Business Administration; Director

## Requirements

### The Minor

The minor in Sport Management is an interdisciplinary program that studies various aspects of administering a sports organization or program, including: legal issues, sociological concerns, and a variety of management functions. Students contemplating graduate school in Sport Management or a career in athletic management would be well suited for this program.

Completion of the program will be indicated on the student's transcript with the notation, "Minor in Sport Management."

Students interested in the minor should contact the Director of the Sport Management minor.

The requirement for the minor in Sports Management is the completion of 24 credit hours as follows (15 of which must be upper division):

#### A. *Required courses:*

MGMT 2301	Management of Organizations
SPMT 1312	Sport in Society
SPMT 3308	Sport Management*
SPMT 3309	Legal Issues in Sport

#### B. *Community Service Experience:*

Community Service combines volunteerism with pre-experience education and post experience reflection. An essential element of sport management is understanding the important role sport plays in society. As such, minors must complete a total of 50 community service hours. In order to successfully complete the requirement, students are expected to complete an average of 12.5 community service hours over four semesters.

SPMT 3000	Community Service Experience*
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C. Six hours in elective Sport Management courses (to include no more than three hours in SPMT 3-90 or SPMT 3-99):

COMM 3357	Sport Media (also listed as SPMT 3317)
PHED 1106	Sport Officiating Laboratory* (also listed as SPMT 1106)
PHED 1165	Intramural Programming (also listed as SPMT 1165)
SPMT 1106	Sport Officiating Laboratory* (also listed as PHED 1106)
SPMT 1165	Intramural Programming (also listed as PHED1165)
SPMT 1306	Sport Officiating
SPMT 1314	Athletic Facility and Event Management
SPMT 3108	Sport Sales Laboratory*
SPMT 3312	Ethics in Sport Management*
SPMT 3314	History of American Sport*
SPMT 3315	Financial Aspects of Sport Management*
SPMT 3316	Leadership for Sport Professionals
SPMT 3317	Sport Media (also listed as COMM 3357)
SPMT 3319	Sport and Sponsorship Marketing
SPMT 3-90	Directed Study in Sport Management*
SPMT 3-99	Sport Management Internship*
SPMT 4301	Organizational Theory in Sport Management*
SPMT 4302	Seminar in Contemporary American Sport*

D. Six elective hours from the following courses:

**A. Communication and Marketing**

COMM 3360	Principles of Public Relations*
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COMM 3361	Principles of Advertising*
HCOM 1333	Public Speaking
MKTG 3381	Consumer Behavior*
MKTG 3382	Integrated Marketing Communications

### **B. Finance**

ACCT 1302	Fundamentals of Managerial Accounting*
FNCE 3301	Financial Administration of Business Firms*
FNCE 4351	Financial Management and Policy*

### **C. Management**

BUSN 3311	Organizational Communication (also listed as HCOM 3362)
ECON 3327	Sports Economics
ECON 3329	Labor Economics and Labor Relations* (also listed as MGMT 3311)
HCOM 3360	Communicating in Small Groups and Teams
HCOM 3362	Organizational Communication (also listed as BUSN 3311)
MGMT 3311	Labor Economics and Labor Relations* (also listed as ECON 3329)
MGMT 3371	Human Resource Management
MGMT 3372	Organizational Behavior*

\*This course has at least one prerequisite. See the course description for details.

## Courses

### SPMT-1106 Sport Officiating Laboratory

This laboratory is designed to provide students an opportunity for practical implementation of the practices and skills learned in SPMT 1306.(Also listed as PHED 1106). Prerequisite: SPMT 1306 or consent of instructor.

### SPMT-1165 Intramural Programming

In this course, students will plan and participate in new recreational opportunities. Students will create an event and teach their classmates the rules, regulations, and policies for that particular sport or recreational activity and

then participate in that event as a group. (Also listed as PHED 1165)

### SPMT-1306 Sport Officiating

The purpose of this class is to provide students a meaningful educational experience of both a practical and theoretical nature in the area of sports officiating.

### SPMT-1312 Sport in Society

A study of contemporary issues in sport and the impact sport has on society. Topics that will be critically analyzed included children and sport, sport and education, gender and racial issues, and deviance in sports.

### SPMT-1314 Athletic Facility and Event Management

This course explores the basic concepts pertaining to the planning, organizing, and conducting of sporting events, both amateur and professional. Additionally, the course will address the planning, development, and maintenance of sport and leisure facilities.

### SPMT-3000 Community Service Experience

This course combines community service at designated local non-profit sport agencies with pre-experience education and post experience reflection. May be taken multiple times. Offered P/F only. (Offered every semester.) Prerequisite: Consent of Instructor

### SPMT-3108 Introduction to Sport Sales

Explores the application of sport sales techniques, with an emphasis on group sales, in a professional team setting. Students will have significant interaction with local ticket industry professionals and work in teams to successfully sell group tickets to a local sporting event. Offered P/F only. (Offered every Fall.) Prerequisite: MGMT 2301 Corequisite: Should be taken concurrently with SPMT 3308

### SPMT-3308 Sport Management

Studies the foundation and application of sport management as it applies to athletics, business, and physical education. Includes organizational theory, leadership, sport law, ethical concerns, budgeting, and marketing. Prerequisite: MGMT 2301

### SPMT-3309 Legal Issues in Sport

This course provides an understanding of the legal system, its terminology, and legal principles applied to professional and amateur sports. Emphasis is on identifying and analyzing legal issues affecting the sports

environment, such as contracts, tort law, regulation of sports agents, labor management relations, civil rights legislations including Title IX, discrimination issues, and antitrust arbitration decisions.

### SPMT-3312 Ethics in Sport Management

This course will focus on the exploration of contemporary values, issues, and controversies associated with sport and sport management. It is designed to provide students with a fundamental, theoretical and practical knowledge of various ethical issues that may arise in sport. Students will become familiar with ethical decision-making methods and potential solutions to ethical issues they may encounter as sport professionals. Ethical concepts and issues will be examined through lectures, class discussions, presentations and group assignments. Prerequisite: SPMT 3309 (Legal Issues in Sport).

### SPMT-3314 History of American Sport

This course explores the historical evolution of American sports from colonization to globalization. The course examines sport experiences in colonial America, the antebellum health reform movement, sport and social changes during the progressive era, and the rise of modern sport. Emphasis will be given to the place of sport in the university and the development of the National Collegiate Athletic Association. Prerequisite: SPMT 1312 (Sport in Society)

### SPMT-3315 Financial Aspects of Sport Management

The course provides insights into the ownership formation, economic drivers, sources of revenue production, sports broadcasting and programming, player cost issues, market risks, facility development, long-term financial planning for sports organizations and professional athletes, and the economic impact of unions in professional sports. (Offered every Spring). Prerequisites: ACCT 1302 and SPMT 3308 or consent of instructor.

### SPMT-3316 Leadership for Sport Professionals

This course explores the development of personal leadership skills for athletic directors, coaches, managers, and others in the sport industry. An emphasis will be placed upon the relationship between goal development and organizational culture as each relates to key approaches, models, and theories in the leadership field.

### SPMT-3317 Sport Media

This course will critically examine the relationship between sport media issues such as race, gender, sexuality, nationalism, capitalism/consumerism, violence, and civic life. Ethical implications and the impact of social will also be explored. (Also listed as COMM 3357) Prerequisite: COMM 1301 or SPMT 1312 or Consent of Instructor

### SPMT-3319 Sport and Sponsorship Marketing

Explores the opportunities and evolving nature of the sports marketing industry, while studying and analyzing in-



market campaigns aligned with some of the world's most notable sports properties and brands. Prerequisites: SPMT 3308; and MKTG 2301 or COMM 3360 or COMM 3361

### SPMT-3-90 Directed Study in Sport Management

Independent study or research, or advanced selected topics in sport management that are not covered in other classes. Variations in credit according to the work performed, 1 to 3 credit hours. Class may be repeated once, provided the topic varies. Prerequisite: Consent of instructor

### SPMT-3-99 Sport Management Internship

The Internship is to be structured and supervised professional work experience with an accepted employer in the private, public or non-profit sector. To be recognized, the experience must be pre-approved and must include specific learning objectives. An internship is typically done by a student who has attained sufficient preparation in an academic field. The experience may be paid or unpaid. Variations in credit according to the work performed, from 0 to 6 hours. Must be taken on a Pass/Fail basis. Prerequisite: Consent of Instructor

### SPMT-4301 Organizational Theory in Sport Management

Designed for those students who desire to study Sports Management in graduate school. The course examines the structure and design of sport organizations. Special emphasis will be placed on organizational decision making, power, and culture. Additionally, students will be introduced to research methods used in sport management and required to develop a small scale research or assessment project. Prerequisite: SPMT 1312, 3308, and consent of instructor.

### SPMT-4302 Seminar in Contemporary American Sport

Discussion-oriented course focusing on the connection between sports, culture, and selected contemporary American institutions. Using theoretical frameworks such as cultural hegemony, social capital, and new institutionalism, students will explore the place of sports in educational institutions, the intersection of sports and politics, the symbiotic relationship between sport and media, and the economic realities of modern sport. Prerequisite: SPMT 3314 or Consent of Instructor

# Urban Studies

## Faculty

### Core Faculty

[Christine Drennon, Ph.D.](#) , Associate Professor, Sociology and Anthropology

[Tahir H. Naqvi, Ph.d.](#) , Associate Professor, Sociology and Anthropology

[Kathryn O'Rourke, Ph.D.](#) , Associate Professor, Art and Art History

[Shana McDermott, Ph.D.](#) , Assistant Professor, Economics

### Contributing Faculty

[Nels Christiansen, Ph.D.](#) , Associate Professor, Economics

[Kenneth Loiselle, Ph.D.](#) , Associate Professor, History

[Curtis Swope, Ph.D.](#) , Associate Professor, Modern Languages and Literatures

[Carey H. Latimore IV, Ph.D.](#) , Associate Professor, History

[Timothy O'Sullivan, Ph.D.](#) , Professor, Classical Studies

## Overview

Urban Studies is an interdisciplinary field that focuses on the global phenomenon of urbanization. The program incorporates a wide variety of disciplinary approaches to the study of urbanization and urban processes. Students may choose an Urban Studies major to explore the city from a diversity of perspectives, or to prepare for a career in one of the many fields that touch on urban life. Urban Studies majors have extensive interaction with the city in research, class projects, and internships.

## Requirements

### The Major

The requirements for the degree of Bachelor of Arts with a major in Urban Studies are as follows:

#### **I. Specific degree requirements (34 credit hours total):**

A. The Core Curriculum (6 credit hours)

URBS/SOCI 1310 The Urban Experience

URBS 3370 Applied Urban Studies

B. Methods Requirement (3 credit hours):

All urban studies majors must take one "methods" class from the following list. With the approval of their advisers, students will choose the course most appropriate to their own interests in the field.

ART 1410 Design

ART 2430 Beginning Drawing

URBS/SOCI 3365 Research Methods: GIS

URBS/SOCI 3460 Research Methods: Social Statistics

SOCI 3353 Research Methods: Fieldwork

HIST 3381 Historians and Their Craft

GEOS 3408 GIS and Remote Sensing

C. Concentration Requirement (15 credit hours):

Students must complete 15 credit hours (minimum) from one of the following concentrations:

The **Urban History and Form** concentration introduces students to major problems in the history of urban planning, architecture, and landscape architecture, and provides a foundation for graduate work in planning, architecture, and design.

The **Urban Issues and Policy** concentration introduces students to contemporary issues impacting urban society, and prepares students for graduate programs in public policy, public administration, urban planning, and many of the social sciences, and for careers in non-profit organizations, education, government, and consulting.

**Concentration Lists (classes must come from at least three different disciplines):**

**Urban History and Form**

ARTH 1412 Art and Architecture of Latin America Since the Sixteenth Century

ARTH 3452 Nineteenth-Century Architecture and Urbanism

ARTH 3454 Mexico City

ARTH 3461 Public Art Across the Border

ARTH 3464 Twentieth-Century Architecture and Urbanism

GEOS 1304	Environmental Geology
ECON/URBS 3334	Urban Economics
HIST 3333	History of Paris
GRST 3307	Berlin: From Cabarets to Communists
SOCI/URBS 3340	Urban Geography
URBS 4-91	Special Topics in Urban Studies [as appropriate]

### **Urban Issues and Policy**

URBS/ANTH 4352	Global Cities
URBS/ANTH 3445	Understanding Refugees
ARTH 3461	Public Art Across the Border
HCAD 3350	The U.S. Healthcare System
SOCI 2314	Social Problems and Human Values
SOCI/URBS 3340	Urban Geography
ECON 3323	The Economics of Government
ECON/URBS 3334	Urban Economics
PLSI 3313	Policy Analysis and Policymaking
PLSI 3316/URBS 3336	Urban Politics
URBS 4-91	Special Topics in Urban Studies [as appropriate]

D. Elective Requirement (6 credit hours): taken from the other list or the methods list.

E. Distribution Requirement:

No more than 12 of the hours used to satisfy the major requirements (including crosslisted courses) may come from any one department. No more than 12 credit hours may be from lower-division courses.

F. The Senior Experience (4 credit hours)

**II. University requirements:** completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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## The Minor

### I. Completion of 18 credit hours of Urban Studies courses, including:

A. URBS/SOCI 1310—The Urban Experience

B. Urban Studies electives (15 credit hours) chosen from the Concentration lists above.

C. Additional Requirements:

1. At least 9 hours of the total must be in upper-division courses.
2. No more than 12 of the hours used to satisfy the minor requirements (including crosslisted courses) may come from any one department.
3. At least 9 hours of the total must come from URBS courses (including cross-listed courses).
4. No more than 3 hours of URBS 3-88/3-89 may be used to meet the minor requirements.

## Courses

### URBS-1310 The Urban Experience

An introduction to the city, its origins, contemporary form, and likely future. The course will present the city and urban phenomena in both the American context and other national environments. The major emphasis will be placed on understanding the physical, social, economic, and political systems which create and sustain urban areas. (Also listed as SOCI 1310). (Offered every year.)

### URBS-1316 People and Places in Global Context

A study of the complex ways in which modern social organization materializes geographically. Topics include the distribution and movement of human populations, characteristics and distribution of cultural mosaics, patterns of economic interdependence, and the forces of cooperation and conflict among peoples from both global and local perspectives. (Also listed as SOCI 1316).

### URBS-2328 Social Inequality

A study of the stratification of American society in terms of the unequal distribution of wealth, status and power. Theories on the origin and development of social classes as well as the functional necessity of social inequality will be examined along with empirical works dealing with inequality. (Also listed as SOCI 2328). (Offered occasionally).

### URBS-3305 The City in History

Cross-cultural examination of urban life in the pre-industrial and industrial cities of Asia, Europe and the Americas from a historical perspective with special emphasis on the U.S. urban experience. Lecture and discussion format. (Also listed as HIST 3382.)

### URBS-3330 Economics and the Environment

The economic problem of coping with a finite environment. Study of the interrelationships among economic growth, environmental quality, urban concentration and resource constraints. Economic analysis of pollution control and other environmental policy problems. (Also listed as ECON 3330.) Prerequisite: ECON 1311.

### URBS-3334 Urban Economics

Analytical study of the reasons for cities to exist, the location of economic activity, the economic base of urban areas and the functioning of urban land markets. Economic analysis of selected urban policy issues such as local economic development, zoning and growth controls, housing, transportation, poverty, crime, and the provision of local public services. Attention is paid to the urban experience outside as well as within the U.S. (Also listed as ECON 3334). Prerequisites: ECON 1311, and three hours of upper-division credit in either Economics or Urban Studies.

### URBS-3340 Urban Geography

This course examines the history and contemporary processes of urbanization, primarily in the North American context. In particular, we are concerned with the geography of these processes, resulting in differentiation of space and the creation of distinct places. We will examine the geography of urbanization at several scales, ranging from development of the North American urban system to the experiences of neighborhoods within cities. (Also listed as SOCI 3340.) Prerequisite: At least 3 hours completed in Sociology

### URBS-3460 Research Methods: Applied Social Statistics

This course provides hands-on approach for learning how to undertake quantitative social research focused on the design and completion of a semester long research project. A variety of statistical tools are addressed, including descriptive statistics, tests of significance, and linear regression and correlation. The course goals emphasize writing and rewriting, learning how to formulate and test research hypotheses, and understanding how to present results in an accurate and effective manner. (Also listed as SOCI 3460 and ANTH 3460).(Offered every Spring.) Prerequisite: ANTH or SOCI 3359

## URBS-3365 Research Methods: GIS

This course provides a hands-on approach for learning how to undertake spatial social research focused on the design and completion of a semester long research project. Spatial tools introduced emphasize geographic information systems. The course goals include map making and the integration of information technology and cartography. (Also listed as SOCI/ANTH 3365). (Offered every year.) Prerequisite: SOCI 3359 or ANTH 3359

## URBS-3366 Governance and Public Policy in Contemporary China

This course covers most significant issues of contemporary policies and public policy in China. It explores the forces changing the lives of nearly a fifth of humanity, the 1.1 billion people of China. This course is designed to be experimental in both subject and teaching methodology. In order to explore the political, economic, and social processes of liberalization that have created this new era of the increased circulation of people, ideas, commodities and technologies across national boundaries, seminar participants must use materials and methods from many scholarly disciplines and traditions: urban studies, political science, sociology, history, anthropology, economics, and media/cultural studies. In order to study these increasingly mobile populations that often fall outside the boundaries of conventional area studies approaches, students must develop innovative comparative case study and survey methodologies. (Also listed as PLSI 3366, CHIN 3366).

## URBS-3367 Comparative Views of Modern China

This course represents an overview of the most important economic relationship of the twenty-first century. The global financial crisis that started in 2008 revealed just how much the strategic relationship between China and the United States represents the heart of the world's economy. China has recently surpassed Japan to become the world's second largest economy and America's third largest commercial partner. The rise of China has brought about a reorganization of the global economy and the international balance of power. This new world order carries challenges and opportunities. China remains a communist country with a significant legacy of a command economy. It is also a market economy. Understanding this mixture - capitalism with Chinese characteristics or the Chinese variety Capitalism - is the major aim of this course. We also cover topics relevant to the economic relationship between China and the USA, including international trade and the balance of trade, the Chinese currency system, the growth of China and its growing influence in the international sphere. (Also listed as ECON 3367, CHIN 3367, and BUSN 3367).

## URBS-3370 Applied Urban Studies

This course combines the academic study of Urban Studies with a service learning component; classroom work will be integrated with off-campus internships. Prerequisites: URBS 1310 and Urban Studies Major, or consent of instructor.

## URBS-3416 Urban Politics

An exploration of the urban space, including the politics, institutions, power centers, policies, and the people who

live in urban environments. Emphasis is given to why cities matter, how cities are organized, how cities operate as an economic engine, and how cities shape identity and experiences while producing inequality. Contemporary urban issues are considered, such as demographic changes, community power, and public transportation. (Offered every Spring.) (Also listed as PLSI 3416).

### URBS-3445 Understanding Refugees

An interdisciplinary study of the refugee experience from global and local perspectives. The course will examine how the human rights of refugees are understood from the points of view of international law, humanitarian institutions, and of refugees themselves. The ways in which refugees negotiate the trauma of the past and the demands of everyday life in cities in their host countries will also be examined. Includes a directed field research experience. (Also listed as ANTH 3445 and SOCI 3445). (Offered every other year.) Prerequisite: At least 3 hours completed in ANTH, SOCI, or URBS

### URBS-3452 Global Cities: Africa, Asia, and the Americas

This course offers theoretical and empirical tools for the study of urban processes in Asia, Africa, and the Americas. It examines the major problems of housing and infrastructure confronting cities in these regions, and emphasizes the role of globalization in urban transformation. (Offered every other year.) (Also listed as ANTH 3452.) Prerequisite: URBS 1310 or at least 3 hours completed in ANTH

### URBS-3-88 Urban Studies Internship

Field-work experience in a setting approved by the student, professor, and the organization selected. Supervision and guidance will be provided by the host organization and the professor. The course must be taken on a graded basis. Prerequisite: Consent of instructor

### URBS-3-89 Urban Studies Practicum

Field-work experience in a setting approved by the student, professor, and the organization selected. Supervision and guidance will be provided by the host organization and the professor. This course must be taken on a Pass/Fail basis. Prerequisite: Consent of instructor

### URBS-3-90 Independent Study

Independent study in selected areas. 1 to 6 hours. Prerequisites: 6 advanced hours in Urban Studies or consent of instructor.

### URBS-4391 Special Topics in Urban Studies

Announcement of each course will be by prospectus. May be repeated when topics vary.



## URBS-4494 Senior Seminar

The Senior Seminar in Urban Studies is the capstone experience for the Urban Studies Major. It serves as a synthesis course for the wide variety of courses taken in this interdisciplinary program. In it, students undertake either a traditional research project, or community-based research project, for which they are responsible for primary data collection, analysis, and presentation. Projects are true synthesis of the various discipline perspectives of the city and urban issues.

# Women's and Gender Studies

## Faculty

[Dania Abreu-Torres, Ph.D.](#) , Assistant Professor, Modern Languages and Literatures

[Laura Agoston, Ph.D.](#) , Associate Professor, Art and Art History

[Rosana Blanco-Cano, Ph.D.](#) , Associate Professor, Modern Languages and Literatures

[Jenny Browne, M.F.A.](#) , Associate Professor, English

[Sarah E. Erickson, Ph.D.](#) , Assistant Professor, Communication

[Andrew Kania, Ph.D.](#) , Professor, Philosophy

[Debra Ochoa, Ph.D.](#) , Associate Professor, Modern Languages and Literatures

[Amy L. Stone, Ph.D.](#) , Associate Professor, Sociology and Anthropology

[Angela Tarango, Ph.D.](#) , Associate Professor, Religion

## Overview

The minor in Women's and Gender Studies is an interdisciplinary program that explores the cultural construction of gender and sexuality from a variety of academic perspectives. Classes investigate gender in relation to such topics as race and class; women's history and power; men's studies; and queer studies and theory.

Students interested in declaring a Women's and Gender Studies minor should contact the co-directors of the Women's and Gender Studies Committee.

## Requirements

- [The Minor](#)
- [Core Courses](#)
- [Supporting Courses](#)

## The Minor

The requirements for a minor in Women's and Gender Studies are as follows:

- I. 19 credit hours consisting of at least one core course and courses from at least two of the categories listed under [Supporting Courses](#): Humanities, Social Sciences, and Natural Sciences. Students may take up to four hours of Women's and Gender Studies Colloquia.
- II. No more than 6 hours can overlap with a student's primary major.

- III. No more than 6 hours can be taken from a single department listed below under [Supporting Courses](#).
- IV. At least 9 hours must be upper-division courses.

WAGS 3122—Women’s and Gender Studies Internship is strongly recommended for all WAGS minors.

## Core Courses

CLAS 1307	Gender and Identity in the Ancient World (also listed as HIST 1311)
HIST 1311	Gender and Identity in the Ancient World (also listed as CLAS 1307)
MUSC 1345	Women and Music
SOCI 2311	Sociology of Sex Roles
WAGS 2310	Introduction to Women’s Studies
WAGS 2350	Introduction to Feminist Theory
WAGS 2351	Introduction to Queer Studies
WAGS 2352	Introduction to Gender Studies

## Supporting Courses

### Humanities

ARTH 3341	Early Renaissance Art in Italy
ARTH 3351	Nineteenth-Century Art: Romanticism and Impressionism (c. 1800-1900)
ARTH 3392	Women’s Studies in Art History
CHIN 3312	Chinese Cinema: A Historical and Cultural Perspective
CLAS 1307	Gender and Identity in the Ancient World (also listed as HIST 1311)
CLAS 3403	Greek and Roman Drama (also listed as DRAM 3325 and ENGL 3322)
CLAS 3404	The Ancient Novel
COMM 3325	Special Topics in Communication Media: Queer Theory and Mass Media
ENGL 3322	Green and Roman Drama (also listed as CLAS 3403 and THTR 3325)
ENGL 3427	Contemporary Literature
ENGL 3337	Literary Theory
ENGL 3471	Studies in American Literature: American Women Writers of the Nineteenth Century

ENGL 3375	Postmodern Literature
ENGL 4320	Studies in Early Modern British Literature: Shakespeare's Sonnets and the Subject of Sexuality
ENGL 4320	Studies in Early Modern British Literature: The Performance of Gender, Wyatt to Shakespeare
ENGL 4423	Studies in American Literature: The Harlem Renaissance
ENGL 4423	Studies in American Literature: Literature and Culture on the Latino/a Borderlands
ENGL 4423	Studies in American Literature: Sentimentalism: Nineteenth Century Literature and American Femininity
ENGL 4423	Studies in American Literature: The New Woman
ENGL 4423	Studies in American Literature: Queering the Nineteenth Century
ENGL 4425	Seminar in Literary Periods: Modernism and Woman
ENGL 4426	Seminars on Individual Authors: George Eliot and Virginia Woolf
ENGL 4426	Seminars on Individual Authors: Jane Austen
ENGL 4426	Seminars on Individual Authors: Virginia Woolf
GERM 4301	Genre Studies in German Literature: Gender in the German Novella
GERM 4310	Seminar in German Literature: Frauenliteratur
GERN 4310	Seminar in German Literature: Women and War
HIST 1311	Gender and Identity in the Ancient World (also listed as CLAS 1307)
HIST 3300	Gender Matters in African History
HIST 3363	Early American Social History
HIST 3431	History of Sexuality in Modern Europe
HIST 4400	Seminar in African History: Life Histories of African Women
HCOM 4340	Gender and Human Communication
HUMA 34xx	The History of Sexuality
ML&L 3310	French Literature in Translation: Versions of Feminism
ML&L 3310	French Literature in Translation: The French Novel
MUSC 1345	Women and Music
PHIL 3454	Philosophy of Gender
PLSI 1332	Film, Literature, and Politics of the Third World

RELI 3401	Gender and Religion
SPAN 4338	Spanish Women Writers
SPAN 4348	Spanish American Women Writers
SPAN 4348	Sexualities in Hispanic Literatures and Films
SPAN 4391	Special topics: Chicana Feminisms
THTR 3325	Greek and Roman Drama (also listed as CLAS 3403 and ENGL 3322)

### Social Sciences

ANTH 2339	Health, Illness, and Society (also listed as SOCI 2339)
ANTH 3329	Sexuality and Society (also listed as SOCI 3329)
ANTH 3331	Language, Culture, and Society (also listed as SOCI 3331)
ANTH 3345	International Issues in Health and the Environment (also listed as SOCI 3345)
ANTH 3428	Gender Transgressions (also listed as SOCI 3428)
COMM 3325	Special Topics in Communication Media: Popular Culture, Gender, and Communication
PLSI 3349	Special Topics in International Politics: Women in Islam
PSYC 2323	Psychology of Gender
PSYC 3322	Social Development
SOCI 2311	Sociology of Sex Roles
SOCI 2312	Sociology of Marriage and the Family Experience
SOCI 3313	Social Movements
SOCI 3329	Sexuality and Society (also listed as ANTH 3329)
SOCI 3331	Language, Culture, and Society (also listed as ANTH 3331)
SOCI 2339	Health, Illness, and Society (also listed as ANTH 2339)

### Colloquia

WAGS 3-17	Gender Studies Colloquium
WAGS 3-18	Women's Studies Colloquium
WAGS 3-19	Queer Studies Colloquium

Note: Special topics courses are approved by the advisory committee only for the specific topic listed.

## Courses

### WAGS-2310 Introduction to Women's Studies

A feminist perspective on work, family, sexuality, identity formation, class stratification, racial and cultural diversity, and cultural representations of gender. Overview of the history of the women's movement and historical and contemporary debate among feminists.

### WAGS-2350 Introduction to Feminist Theory

An introduction survey of feminist theory, both as an intellectual, philosophical tradition and as a program of political activism. At the discretion of the instructor, this course may entail a history of feminist theory; an engagement in specific debates or school of criticism; and/or involvement in community activism.

### WAGS-2351 Intro to Queer Studies

An introduction to the interdisciplinary field of Queer Studies. Topics may include a historical survey of homosexuality and the Gay Rights movement; queer theory; psychoanalysis and psychology of sexuality; film and media studies; discussion of current events.

### WAGS-2352 Introduction to Gender Studies

An introductory survey of the interdisciplinary field of gender studies. Topics may include masculinity and men's studies; feminism and the construction of femininity; sexuality and queer theory.

### WAGS-3401 The History of Sexuality: Sex and Gender In Modernity

This course will examine the concept of sexuality (and related concepts like "gender" and "love") in a selection of texts from the Greeks to the present day. It will trace two concepts of sexual desire that have competed in European history: desire as dangerous and disorderly; and desire as productive, even revolutionary. In doing so, the course will trace changing attitudes toward sexuality through some historical paradigm shifts in European history and consider how the history of sexuality has evolved from an earlier marginalized status to a central place in contemporary cultural thought. In this way, the course will define sexuality broadly as both individual identity and cultural category and will include discussions of sexuality in its institutional and discursive contexts.

### WAGS-3-17 Gender Studies Colloquium

This course analyzes gender and sexuality by addressing topics organized under themes selected by participating faculty through class discussions, lectures, student presentations, and visiting speakers. Students may enroll in the colloquium no more than three times.

### WAGS-3-18 Women's Studies Colloquium

The colloquium meets under direction of faculty of the Women's and Gender Studies Advisory Committee. Session topics are organized around themes selected by the Advisory Committee, to be explored through class discussions, faculty research, student presentations, and visiting lecturers. Students may enroll in the colloquium no more than three times.

### WAGS-3-19 Queer Studies Colloquium

The Queer Studies Colloquium analyzes the variety of gender identities and representations, including lesbian, gay, bisexual, transgender and transsexual topics. In addition, this course help understand conventional heterosexuality within a broader context. Session topics are organized around themes selected by University faculty, to be explored through class discussions, lectures, student presentations, and visiting speakers. Students may enroll in the colloquium no more than three times.

### WAGS-3122 Women's and Gender Studies Internship

Entails work experience with issues pertaining to women, gender, or sexuality. Students are expected to select a suitable forum for such work, whether on or off-campus, and to arrange for their own employment. Students may also apply to intern with the Women's History Month Planning Committee. Consent of Women's and Gender Studies program co-chairs required.

### WAGS-3-75 Science, Gender, and Sexuality Colloquium

This team-taught course investigates scientific approaches to sexuality and gender. To be taught by faculty from various scientific disciplines. Prerequisite: WAGS 2350, 2351, or 2352, or consent of instructor.