

Course of Study Bulletin 2020-2021

Undergraduate and Graduate Studies Effective June 2020 for the 152nd Academic Year.

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CoSB Guidelines

<u>Academic Regulations</u>

- Credit Hours
- Academic Workload
- <u>Undergraduate Enrollment in Graduate Courses</u>
- Classification of Students
- Grades

included in all course syllabi.

A minimum of 120 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).

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.

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.

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.

Grades

GRADING SYSTEM

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

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

С	Adequate	2.000
C-		1.667
D+	Poor	1.333
D		1.000
	Failure	0.000
1		Incomplete
W		

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.

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.

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.

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:

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 Cur Pathways requirement may be taken Pass/Fail unless the course is offered exclusively on a	
basis.	

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 to demonstrate it is more likely than not the course instructor utilized inappropriate criteria in determining the grade or did not adhere to the stated grading procedures. An appeal on any other grounds will be dismissed.

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 4 below, members of the Administration are not involved in the grade appeal process.

1. Prior to initiating the appeal of a semester grade, the student will speak to the instructor about the student's concerns as soon as possible after receiving the grade. The instructor will consider the student's concerns and make a decision regarding whether or not to change the grade. If the student remains convinced that the contested grade results from inappropriate criteria or failure to adhere to the stated grading procedures, then the student may appeal the grade as set forth in step two below.

adviser, if requested) may be present for the duration of the meeting (prior to voting), during which both parties may offer clarifying statements and answer any questions of the committee. The department Chair will also be present at the meeting, but will not be involved in the determination of the appeal. After considering the written statements, graded work, and information from the meeting, the committee will determine whether it is more likely than not the course instructor utilized inappropriate criteria in determining the grade or did not adhere to the stated grading procedures. The Chair (or the Chair's substitute) will give written notification of this decision to the student and the instructor within five (5) class days of the meeting. 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 within five (5) class days of the decision, then the committee may undertake an evaluation of the student work in question and assign the grade it deems appropriate. The deadlines set forth in this step may be extended for good cause, as determined by the Chair (or Chair's substitute).

- 1. If either the student or the instructor contests the decision of the departmental committee, the student or instructor may pursue an appeal to the Vice President for Academic Affairs (VPAA) by submitting a written appeal within ten (10) class days of receiving notice of the departmental committees decision. The VPAA will provide the other party a copy of the appeal and five (5) class days to submit a response. The VPAA 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 departmental committee will stand as rendered;
 - B. That the departmental 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 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 determination regarding the semester grade, following the same procedure outlined for the departmental review committee in paragraph 3, above.

The deadlines set forth in this step may be extended by good cause, as determined by the VPAA.

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.

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
	5.100.00.00.00.00.00.00
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.

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.

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.

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 forAcademic 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

Therefore, only work experiences that are pre-approved by an academic department will qualify for academic cre	edit

- 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 con junction 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	3	20
(lower division)	(3 credit hours)	(specific course)

Faculty advisers or personnel in the Registrar's Office can assist with explanation of course number meanings.

Course Abbreviations

Art History	African American Studies	AFAM
	Art and Art History: - Art - Art History	ART ARTH
	Arts, Letters, and Enterprise	ALE
	Biology	BIO
	Biomathematics	BIMA

School of Business:

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

Degree Requirements

- Pathways: The Trinity Curriculum
- Information Literacy at Trinity University
- Graduation Requirements
- Residency Requirements
- Student Responsibility
- <u>Guidelines</u>
- Curricular Element I: The First-Year Experience
- Curricular Element II: Approaches to Creation and Analysis
- Curricular Element III: The Core Capacities
- Curricular Element IV: The Discovery
- Curricular Element V: The Major
- Curricular Element VI: Fitness Education
- <u>Curricular Element VII: Experiential Learning</u>
 <u>The Minor</u>

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 60 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 60 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 60-hour residency requirement. These same exceptions apply to special semester domestic programs approved by the Office of Study Abroad.

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.

Guidelines

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

- To earn a bachelor's degree from Trinity University, a student must successfully complete at least 3 credit hours from each of 10 different academic disciplines.
- No course may be used to satisfy both the Approaches to Creation and Analysis and the Interdisciplinary Cluster requirements.
- 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).

*An academic discipline is designated by a particular three- or four-letter subject code, such as "ART" or "ARTH," and excludes "PHED."

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

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).

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. 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
 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.

в. 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.

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 Discovery

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

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.

Upon successful completion of an EXL course, students will have demonstrated the ability to:

- develop goals for and execute a specific project or experience that involves purposeful engagement with the local, national, or global community or the natural environment outside of the formal classroom *
- apply skills, theories, or methodologies gained through their coursework (in this course or more cumulatively) to solve problems or explore issues outside of the formal classroom *

Additionally, some courses may have a more specific designation as follows:

- for a service-learning course designated EXL-SL: reflect how service experience with community partners connects to theories and concepts covered in class
- for an **internship**, designated EXL-INT: articulate how internship experience will improve knowledge and skills needed to achieve personal, academic, and professional goals
- for a research project, designated EXL-UGR: articulate how their scholarly activity makes a meaningful contribution to the discovery or interpretation of knowledge within the relevant discipline(s)
- for a *field study course*, *designated EXL-FS*: employ methodologies and make observations in the field that contribute to the discovery or interpretation of knowledge within the relevant discipline(s)
- for a **study abroad course**, designated EXL-SA: reflect meaningfully on the connections between their experiences abroad and the theories and concepts covered in class.

A. Course Requirements

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 differing the departmental 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

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

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.

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 tailreln—a pr

pr

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

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.

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

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.

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.

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.

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 narb e co 2 hi to Hemeta or Neass.

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.

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



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

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 no have one already.

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 seeived 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 the green patrolle to the summer following their junior year. Secretal linear in this danite of States Regulais Aupmy, retrout the should have met the standards are physically qualified and have met the standards are physical ph

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 di SJe ofhis Ge

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.

Correspondence Study

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

General Information

Mission Independent Status, Charter, Cor		

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.

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,

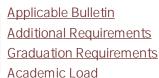
Electronic Communication

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
- Admission
- Advising and Registration
- Readmission
- Minimum Hour and GPA Requirement



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

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:

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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.

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.

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

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

- · Applied research project;
- Portfolio;
- Internship or residency;
- Licensing examination.

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.

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.

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 operated a photon total degree he quirement can be transferred to apply toward a graduate degree. No hours earned toward a completed or previously awarded graduate/professional degree may be transferred. Howeowe be dre the notation of the grued with the unit of the control of the degree may be transferred. Howeowe be dre the notation of the grued with the unit of the degree may be transferred. Howeowe be dre the notation of the grued with the unit of the degree may be transferred.

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.

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.
- 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

Grade Appeals	S
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Trinity University recognizes that students are responsible for maintaining standards of academic performance

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 logistic parties independent substitute in 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.

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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 guestion 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.

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.

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.

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.

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

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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

<u>William T. Burke III, J.D.</u>, Associate Professor, Business Administration; Director <u>Peter O'Brien, Ph.D.</u>, Professor, Political Science <u>Richard K. Reed, Ph.D.</u>, 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 todays 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 fronterizas México-Estados Unidos (bilinguë) (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 fronterizas México-Estados Unidos (bilinguë) (also listed as	

Dynamics Coursework		
PSYC 2341	Social Psychology	
RELI 1360	Religion in the United States	
SOCI 2328	Social Inequality (also listed as URBS 2328)	
SOCI 3343		

Arts, Letters, and Enterprise

Faculty

<u>Jeanna Balreira, B.A.</u>, Strategic Communications and Marketing

<u>Carl Leafstedt, Ph.D.</u>, Associate Professor, Music; Co-Director

<u>Jack Leifer, Ph.D.</u>, Associate Professor, Engineering Science

<u>Luis E. Martinez, Ph.D.</u>, Director, Center for Innovation and Entrepreneurship

<u>Adam Schreiber, M.F.A.</u>, Assistant Professor, Art and Art History

<u>James Shinkle, Ph.D.</u>, 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 oppositiving of the continuous and the program is designed to afford students the oppositiving of the continuous and the program is designed to afford students the oppositiving of the continuous and the program is designed to afford students the oppositiving of the continuous aspects of administering complex organizations in the modern world. The program is designed to afford students the oppositiving of the continuous aspects of administering complex organizations in the modern world. The program is designed to afford students the oppositiving of the continuous aspects of administering complex organizations in the modern world. The program is designed to afford students the oppositiving of the continuous aspects of administering organization of the continuous aspects of administering organization or a student organization organization

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	

ART 3314	Issues in Contemporary Art*
ART 2314/ENGL 2340/GNED 2340/MUSC 2340/THTR 2340	Creative Thinking and the Artistic Process
BAT 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	Integrated Marketing Communications *
MUSC 4321	Applied Music Pedagogy
SPMT 3316	Leadership for Sport Professionals
THTR 3342	Stage Management
THTR 3343	Arts Management

^{*}This course has at least one prerequisite.

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

^{**}Excluding PHIL 3-90, PHIL 3-91, and PHIL 4-90.

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
SPAN 3321	Spanish Cinema*

^{*}This course has at least one prerequisite.

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

Students enrolled in ALE 4x90 will serve as interns for various scientific, governmental, social agency, arts, or non-profit offices on the basis of individual preferences and the availability of assignments. Responsibilities will be

^{**}Excluding PHIL 3-90, PHIL 3-91, and PHIL 4-90.

determined by those offices and by supervising faculty. The student's responsibilities begin with the exploration for and creation of the internship; the nature of the responsibilities and accomplishments will vary with the internship involved. 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. The course is only offered on a Pass/Fail basis. Prerequisite: Consent of program director.		

Art and Art History

Faculty

Laura Agoston, Ph.D., Associate Professor, Art History

<u>Douglas Brine, Ph.D.</u>, Associate Professor, Art History

Lisa Endresen, M.A., Curator of Visual Resources and University Collections, 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

Benjamin McVey, Gallery Manager

Kathryn O'Rourke, Ph.D., Associate Professor, Art History; Director, Architectural Studies

Kate Ritson, M.F.A., Professor, Art; Chair

Adam Schreiber, M.F.A., Associate Professor, Art

Michael Schreyach, Ph.D., 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 is home to two distinct programs, one in art history, the other in studio art. It also houses the architectural studies minor. 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.

- 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, 3464, or 3365. 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 4494 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.

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 be in Studio Art.

Architectural Studies Minor

The minor consists of at least 24 credit hours, 9 of which must be upper division.

The following courses are required:

ART 2430	Drawing I
ARTH 3464	Twentieth-Century Architecture and Urbanism
URBS 1310	The Urban Experience

And one of the following:

ARTH 1314	Art and Architecture of Medieval Europe
ARTH 1412	Art and Architecture in Latin America Since the Sixteenth Century
ARTH 1413	Art and Archeology of Ancient Egypt

Remaining hours may be fullfilled by successfully completing courses from the following list:

Studio Art

ART 2450	Photography I
ART 3450	Photography II
ART 2470	Sculpture: Clay: Handbuilding
ART 2474	Sculpture: Wood
ART 2495	Outdoor Studio
ART 3430	Drawing II

ART 4430	Drawing III	
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Applicable special topics courses

Art History

ARTH 1407	Art History I
ARTH 1408	Art History II
ARTH 1412	Art and Architecture in Latin America Since the Sixteenth Century
ARTH 1413	Art and Archeology of Ancient Egypt
ARTH 1314	Art and Architecture of Medieval Europe
ARTH 3325	Roman Art and Architecture
ARTH 3452	Nineteenth-Century Architecture and Urbanism
ARTH 3454	Mexico City
ARTH 3365	Contemporary Architecture
ARTH 4398	Honors Thesis
ARTH 4399	Honors Thesis

Applicable special topics courses

Engineering

ENGR 1313	Mechanics I (prerequisites: MATH 1311 AND PHYS 1311)
ENGR 1381	Engineering Analysis and Design I
ENGR 3339	Mechanics of Materials (prerequisite: ENGR 1313)

Environmental Studies

ENVI 1301	Introduction to Environmental Studies
ANTH 2357	Humans and the Environment
ANTH 3363	Water, Culture, and Power

Physics

PHYS 1309	General Physics I (prerequisite: MATH 1311 or 1307; corequisite: PHYS 1111)
PHYS 1311	Introduction to Mechanics (prerequisite: MATH 1311 or 1307; corequisite: PHYS 1111)

Urban Studies

HIST 3333	History of Paris
URBS 3330	Economics and the Environment (prerequisite: ECON 1311)
URBS 3334	Urban Economics (prerequisite: ECON 1311 and 3 upper division hours in ECON or URBS)
URBS 3340	Urban Geography
URBS 3365	Research Methods: GIS

Human Communication and Theatre

THTH 2310	Principles of Design
THTR 2312	Experiential Learning

Applicable special topics courses

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 10 credit hours consist of ARTH on all the En ark TH tory are t equring the senior year are t am tth

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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-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 GNED 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 size a theoretical annt

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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-1309 Advanced Placement Credit in Studio Art

Students earning a 5 on the Advanced Placement Test in Studio Art will receive AP credit through this course.

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 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-4450 Advanced Photography Projects

ART 4450 Advanced Photography Projects explores advanced aspects of photographic capture, creation, and output. Emphasizing process-oriented engagement with digital and analog tools, students explore possible forms of photographic objects. (Offered every year.) Prerequisite: at least two courses in photography or consent of the instructor.



processes. Issues in contemporary clay sculpture are explored through guided assignments and student research.

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-2471 Sculpture: Clay: Slip Casting

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.

ART-3471 Sculpture: Advanced Clay Projects

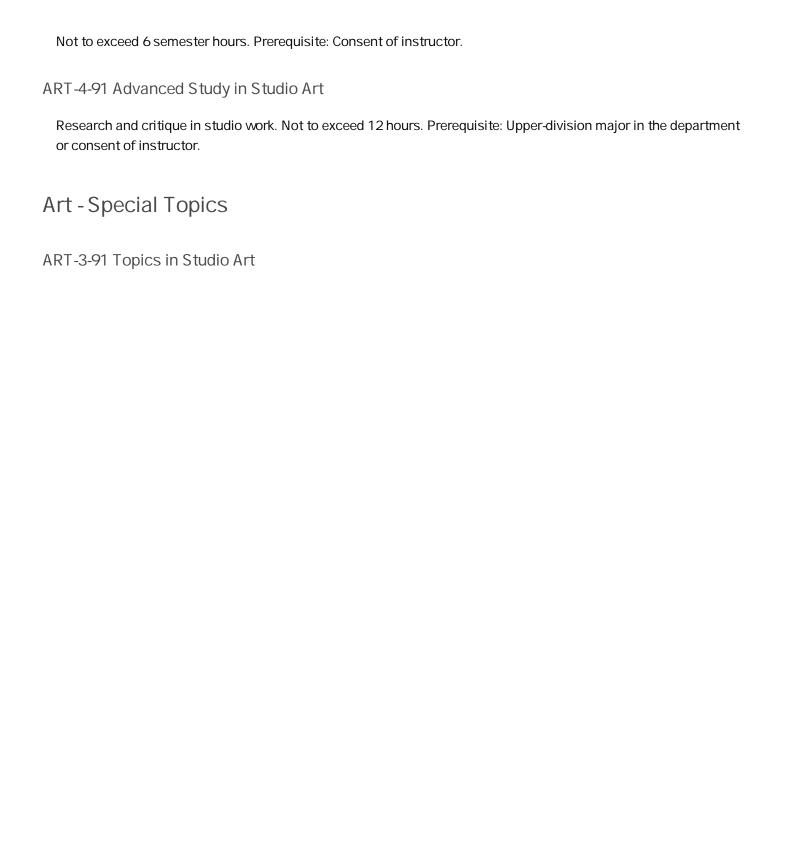
Sculpture: Advanced Clay Projects is focused on porcelain clay and porcelain clay slip. It will develop the student's conceptual and technical interests associated with portfolio development. A series of guided assignments based on hand building, mold making, and casting techniques, are sequenced to explore contemporary issues in art. Research assignments will build on concepts of visual literacy and terminology. May be repeated up to 3 times. Prerequisites: ART 2470 or 2471

ART-3473 Sculpture: Contemporary Concepts and Materials

This sculpture class will introduce visual concepts and applications as they apply to the creation and evaluation of art works composed of mixed materials. Processes will emphasize construction of armatures, additive applications, body casting, and surface treatments. Materials introduced include but are not limited to wood, plaster, found object, and synthetic materials. Students of all skill levels are welcome to enroll. (Offered every year.)

Art - Independent Study

ART-3-90 Special Work in Studio Art



patronage. (Offered every semester.)		
ARTH-1310 Introduction to Asian A	Art: China	

sophomore standing, or consent of instructor.

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. (Offered occasionally.) Prerequisite: Completion of one course in Art History, or sophomore standing, or consent of instructor.

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-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. (Offered occasionally.) Prerequisite: Completion of one course in Art History, or sophomore standing, or consent of instructor.

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. (Offered occasionally.) Prerequisite: Completion of one course in Art History, or sophomore standing, or consent of instructor.

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, combines with close readings of primary and secondary texts. (Offered occasionally.) Prerequisite: Completion of one course in Art History, or sophomore standing, or consent of instructor.

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

repeated with different topics for a maximum of six semester hours. (Offered occasionally.) Prerequisite: Completion of one course in Art History, or sophomore standing, or consent of instructor.

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 one course in Art History, or sophomore standing, or consent of instructor.

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 onsite with museum professionals in San Antonio and the region. Prerequisite: Completion of one course in Art History, or sophomore standing, or consent of instructor.

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-3439 Art at the Courts of Europe, C. 1330 - 1416

This course examines artistic patronage at the papal, imperial, royal, and ducal courts of northern and central Europe in the fourteenth century. Often collectively labeled as "International Gothic," the sumptuous artworks commissioned by the courts range from paintings and sculpture to textiles, manuscripts, and goldsmiths' work. The course addresses various issues relating to these objects, including: taste, luxury, and display; 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 ambitious patrons' relationships with their most talented artists, including Simone Martini, Jean Pucelle, and the De Limbourg brothers (Offered every other year.) Prerequisite: Completion of one course in Art History, or sophomore standing, or consent of instructor.

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 altarpiece, 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 one course in Art History, or 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, economics, 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. (Offered every other year.) Prerequisite: Completion of one course in Art History, or sophomore standing, or consent of instructor.

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 one course in Art History, or sophomore standing, or consent of instructor.

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 religions contexts of his artworks, and the later history of their reception. (Offered every other year). Prerequisite: Completion of one course in Art History, or sophomore standing, or consent of instructor.

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

ody of Michelangelo's work by media: drawing, painting, sculpture, and architecture. Additionally, we will come artist's poetry and letters in detail. Michelangelo was distinctive in his period for his mastery across the and the course is designed to consider his technical accomplishments. ARTH 3447 will introduce students that also monuments of the artist's career but also some of the most important social, cultural, political, philosometrical movements that occurred in fifteenth and sixteenth century Italy. We will also consider the interpretations of the most important social will also consider the interpretation.	media to the ophical

Completion of one course in Art History, or sophomore standing, or consent of instructor.

ARTH-3458 Abstract Expressionism

This course offers an in-depth analysis of Abstract Expressionism in the United States, circa 1940-1960 by examining the most significant critics and artists associated with "New York School" painting at mid-century (among them, Jackson Pollock, Mark Rothko, and Helen Frankenthaler). The class investigates the complex origins of the movement out of the intersection of various spheres: from politics to social history, philosophy to biography, intellectual history to mass culture. (Offered every other year.) Prerequisite: Completion of one course in Art History, or sophomore standing, or consent of instructor.

ARTH-3459 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. (Offered every other year.) Prerequisite: Completion of one course in Art History, or sophomore standing, or consent of instructor.

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 one course in Art History, or sophomore standing, or consent of instructor.

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. (Offered occasionally.) Prerequisite: Completion of one course in Art History, or sophomore standing, or consent of instructor.

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.

ARTH-4494 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. (Offered every Spring.) Prerequisite: Completion of one course in Art History, or sophomore standing, or consent of instructor.

ARTH-3444 Albrecht Durer and His World: Painting and Printmaking in the Age of Reform

This course examines the life and work of Albrecht Dürer in the context of Northern European art of the late fifteenth and the sixteenth centuries. Taking Trinity's copy of the Nuremburg Chronicle as its starting-point, the course explores developments in both printmaking and painting during this period. Topics such as the challenge of the Reformation, the discovery of the Americas, and the impact of Italian art, are explored through the work of Dürer, his contemporaries, and his followers, including Grünewald, Cranach, and Holbein. The class will include a field trip to study Dürer prints at the Blanton Museum of Art in Austin. (Also listed as GRST 3444.)(Offered occasionally.) Prerequisite: Completion of one course in Art History, or sophomore standing, or consent of instructor.

Biomathematics

Faculty

<u>Farzan Aminian, Ph.D.</u>, Professor, Engineering Science <u>Eduardo Cabral Balreira, Ph.D.</u>, Professor, Mathematics; Co-Director <u>Kevin Livingstone, Ph.D.</u>, Associate Professor, Biology; Co-Director <u>David Ribble, Ph.D.</u>, 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 3413	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	Probablistic 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 fall.) 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 faculty research mentor and 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.

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.

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.

Minor in Biology

Aopoh or in Biology



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.

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

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

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 the contribute to disease. Trips to local public health sites are required and will take

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

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 midto late-March. (Offered every Spring). Prerequisites: Biol 3413, 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. This course may not be taken simultaneously with BIOL 4201.

BIOL-3302 Experiential Learning in Cell and Molecular Biology

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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 3413, 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 3413, 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 3413, 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

BIOL-3463 Developmental Biology Through integration of information from various biology subdisciplines, course topics include the following: vertebrate body plan pattering, genetic control of the Drosophila body plan, early morphogenesis, cell differentiation, organogenesis, gamete formation, and fertilization. The laboratory follows development using



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

Individual research and scholarly investigation under faculty supervision leading to the preparation of a thesis. Attendance at the weekly Biology Seminar, which consists of presentations of original research from diverse fields of Biology, is required. A formal research proposal must be submitted to the department chair by the end of the add/drop period during the semester of enrollment in the course. (Offered every semester) Prerequisites: Senior standing and approval of the supervising faculty member.

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 to the students and faculty of the department. Attendance at the weekly Biology Seminar is also required. Prerequisite: BIOL 4398 and approval of the supervising faculty member.

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., Professor; Chair
Brittany E. Long, Ph.D., Lecturer
Corina Maeder, Ph.D., Associate Professor
Jason Shearer, Ph.D., Semmes Distinguished Professor
Adam R. Urbach, Ph.D., Professor

Bachelor of Arts Degree with High School Teaching Certific

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, 3413.
- 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 120 credit hours.

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 120 credit hours.

uidelines for the Acceptance of Majors	



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.

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-1303 Chemistry in Everyday Life

The study of fundamental chemical concepts and the role chemistry plays in our everyday life. Topics will include

ar oo hemistry. This course is designed as a studio course which includes helecture per aboratory activities during the classification of the classificati

occasionally.)

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 stoichometry 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



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, spectroscope 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. Corequisite: 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 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 & 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

the the payment of the properties of the propert

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, organometa c an he bora y

Classical Studies

Faculty

<u>Timothy O'Sullivan, Ph.D.</u>, Professor, Chair

<u>Erwin Cook, Ph.D.</u>, T. Frank Murchison Distinguished Professor of Classical Studies

<u>Nicolle Elise Hirschfeld, Ph.D.</u>, Professor

<u>Thomas E. Jenkins, Ph.D.</u>, Professor, Director of the Collaborative for Learning and Teaching

<u>Lawrence Kim, Ph.D.</u>, Professor

<u>Corinne Ondine Pache, Ph.D.</u>, Professor

Overview

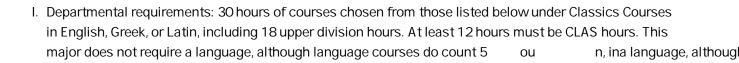
The Department of Classical Studies encompasses the study of all aspects of the Ancient Mediterranean world. The program is highly interdisciplinary in nature, bringing together the fields of history, literature, religion, philosophy, human communication and theatre, art history, archaeology, anthropology, 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

- 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:



Latin

Requirements for taken a major in Latin are longed. Arts with a major in Latin a

- . Departmentals:requirements:
 - AA Completibroof the) elementary and interrantediate sequences (14 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.)
- University requirements: completioned fall rother required telements of the Pathways round but deastath ways r

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.

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



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-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 nekyiai. Each variation on that theme represents a		

CLAS-3161 Early Book and Manuscript Lab			

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.

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, To ,r n tinx, ats nt ancient sources, comparisonin tfilms, and i To exts of scholarship and criticism. (Offered every other year.) Prerequisite: Sophomore standing or consent of instructor, coursework in, or demonstrated know ge of, classical or contemporary literature and s nt scholarly methods desirable but noats quired.

CLAS-3319 The World of Late Antiquity

A study of inx,political, cultural, and religious life of inx,Roman Empire from the second to the fif tcenturies CE-a vital transitional period between the classical and medi linorlds. Beginning n tinx,"golden age" of inx Antonine emperors, this course examines the military and political, "crisis" of inx third century, the Christianization of the empire in the fourth, and the religious and cultural conflicts that accompani the fragmentation of power the fif. (Also listed as HIST 3319.) Prerequisite: Sophomore standing or Consent of Instructor

CLAS-3338 Greek Religious Experience



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-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.

CLAS-3160 Roman World Lab

This humanities lab offers students research opportunities relating to Latin literature and Roman culture, with two main points of focus: ancient Roman religious culture and Latin literature. Students work together with faculty on long-term research projects, including the production of scholarly commentaries on ancient texts and the development of databases and other tools for philological and rhetorical analysis. Students in this course will work with texts in English translation, using the research methods of classical studies. This course typically meets in conjunction with LATN 3160 and RELI 3160. May be repeated for up to six credit hours. (Offered every semester.) Prerequisite: Consent of Instructor

CLAS-3311 Ancient Worlds in Film & Television

In this seminar, we explore how ancient stories are transmitted and transmuted in film, television, and related media. Stories from the ancient Mediterranean and Near Eastern worlds have been important sources for cinema since the invention of film as a medium in the late 19th century, and likewise movies, television shows, and other video formats have been among the most influential vehicles for modern imaginations of antiquity. We explore this rich area by considering roughly a dozen feature-length films, several episodes of television shows, and shorter pieces all spanning 120 years of cinema (including early and silent films), in connection with a wide range of ancient texts (mostly Greek and Roman, some Near Eastern) and in context of modern scholarship (classical-reception studies, film studies). Coursework in, or demonstrated experience with, Classical Studies or Film Studies recommended. (Offered every other year.) Prerequisite: upperclass standing or special permission of instructor

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 2402, 2303, or the equivalent.

GREK-3402 Attic Prose

Readings in Attic prose writers, especially Plato, Xenophon, and the orators. Prerequisite: GREK 2402, 2303, or the equivalent

GREK-3403 Greek Drama

Readings from Greek drama. Prerequisite: GREK 2402, 2303, or the equivalent.

GREK-3404 Greek Historians

Readings in Greek historians, especially Herodotus and Thucydides. Prerequisite: GREK 2402, 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 2402, 2303, or the equivalent.

GREK-3-90 Directed Studies

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' Satyrica 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.

LATN-3160 Roman World Lab

This humanities lab offers students research opportunities relating to Latin literature and Roman culture, with two main points of focus: ancient Roman religious culture and Latin literature. Students work together with faculty on long-term research projects, including the production of scholarly commentaries on ancient texts and the

Comparative Literature

Faculty

Erwin Cook, Ph.D., T. Frank Murchison Distinguished Professor of Classical Studies

Ruben R. Dupertuis, Ph.D., Associate Professor, Religion

<u>Stephen Lee Field, Ph.D.</u>, 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		

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

Communication

Faculty

<u>Aaron Delwiche, Ph.D.</u>, Professor Rebecca Densley , Assistant Professor

- 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 120 hours required for graduation.
- II. University requirements: completion of all other required elements of the Pathways curriculum and at least 120 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

Capstone Seminar

Media Studies

COMM 3120	La Telenovela en Am´erica 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

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			

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-1-94 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. This course may be taken for either zero credit or for one credit. (offered every semester.)

COMM-1301 Mass Media

Study of the communication process and critical analysis of the structural relationships within mass media industries.

W

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, T ts,dia2 ti adca wP

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 department 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 knowle7

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-3372 Intercultural Communication

An introductory survey of the basic theories, research, and applications aimed at understanding and improving communication across racial, ethnic, religious, and cultural differences. It focuses on local, national, and global contexts with attention to the challenges created by identity, language, and nonverbal codes in achieving mutual understanding. (Also listed as HCOM 3372.) (Offered every other year.) 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.

COMM-3180 Research Lab: Healthy Relationships

This course is geared toward the development and application of advanced research skills; such as, literature review writing, study design, data collection, and manuscript writing. Students will participate in ongoing faculty-led research projects. The course will meet one hour per week, with 2 additional hours devoted to various research activities. This course will be graded on a Pass/Fail basis, and may be repeated for up to 3 credit hours. (Also listed as HCOM 3180.) Prerequisites: consent of instructor.

Communication Management

Faculty

J. Charlene Davis, Ph.D., Professor, Business Administration
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; Director

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
HCOM 3334	Persuasion
HCOM 3360	Small Group Communication
MGMT 2301	Management of Organizations
MKTG 2301	Principles of Marketing

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
Britton Horn , Assistant Professor
Mark C. Lewis, Ph.D. , Professor
Berna Massingill, Ph.D. , Associate Professor
Paul Myers, Ph.D. , Caruth Professor of Computer Science
Sheng Tan, Ph.D. , Assistant Professor
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

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 120 credit hours.

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.



CSCI-1311 Introduction to Programming Logic	
Introduction to the basics of computer programming and algorithmic thinking for non-science majors. The court	se

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.

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 1321 or BAT 2302

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 1323

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.



variety of machine learning models and use machine learning to do predictive analysis on various datasets. (Offered every fall.) Prerequisites: CSCI 1321 and MATH 2308

CSCI-3361 Analysis of Algorithms

Complexity of algorithms, time and space requirements, and trade-offs. Searching and sorting, mathematical algorithms, graph and combinational 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, contact-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; Co-Director
Dan Lehrmann, Ph.D., Gertrude and Walter Pyron Professor of Geosciences

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 Philsophies 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 BUST and URBS 3367)	N 3367, ECON 3367,
BUSN 3367	Comparative Views of Modern China (also listed as 0	eh 34

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.

IV. University requirements: completion of all other required elements of the Pathways curriculum and at least 120 credit hours.

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

II. The concentration in an East Asian language:

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	

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.

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.

ecology. (Offered every other year)		

Economics

Faculty

Dennis Ahlburg, Ph.D., Professor

Nels Christiansen, Ph.D., Associate Professor

John H. Huston, Ph.D., Professor

David A. Macpherson, Ph.D., E. M. Stevens Professor, Chair

Shana McDermott, Ph.D., Associate Professor

Maria Pia Paganelli, Ph.D., 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



- 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 sociopolictical 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:

- ECON 1311, 1312, 2320, 3323, 3325, 3326, and 3330 (MATH 1320 or 3335* may be substituted for ECON 2320);
- 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 120 credit hours.

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.

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-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

FCON-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, fame 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

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	
oc as local local public services. Attention is paid to the urban experience outside as well as within the U.S. (Also listed as	
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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: ECONe12311athdof3th2.d 1312.

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 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, 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.

Economics 33427 Uniteringed of made tradets position wi2nt dyy oim and neo-c eoctivroblems 's us onfofsis is otof aactiva pbtuh

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 inecon onal 's on

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

manufacture production models. (Offered every year). (Also listed as BUSN 3366.) 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 I pwit omic re

hin

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/BAT 2301 (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: r....pic A: rch

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

<u>Laura Van Zandt Allen, Ph.D.</u>, Professor; Director of Certification and Assessment; Co-Chair <u>Ellen Barnett, Ph.D.</u>, Assistant Professor Angela Breidenstein, Ed.D.

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 Pyschology

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 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.

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

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.

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.

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.
- 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

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.

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)
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
DI CI 4 204 *	
PLSI 1301*	American Politics
PLSI 1301* PLSI 1331*	American Politics Comparing Countries
PLSI 1331*	Comparing Countries

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.

• German E	arly Childhood Grade 12 Cert	itication	
	German Major		

Plus EDUC 3342

B. EDUC 1331* and 3320* are required.		

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.

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.

Master of Education in School Leadership

The School Leadership program is designed to prepare candidates as innovative and transformational school

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	

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 take 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 prekindergarten 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

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.

ELED-5397 Curricular and Instructional Leadership In Grades Ec-6ýIn Grades EC-6

This course will focus on the knowledge, skills and dispositions required for school-based leadership in an early childhood, elementary or K-8 academy setting. Leading at the EC-6 grade level will be the lens through which students will review the State standards and TEKS for EC-6, experience research-based instructional and assessment practices for the early years, understand the science of reading and language acquisition, examine brain research, developmental milestones and their impact on schooling, and research specific schooling models that support high quality early learning. (Offered every Spring.)

Master of Arts in Teaching

EDUC-5038 Teaching Reading in the Secondary Grades I

Beginning study of literacy and reading in Grades 6-12 with an emphasis on the development of reading and writing processes, as well as teaching reading in the content areas. May only be taken pass/fail. (Offered every Fall.)

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 II

Advanced study of literacy and reading in Grades 6-12 with an emphasis on the development of reading and writing processes, as well as teaching reading in the content area. EDUC 5038 is a prerequisite. Prerequisite: EDUC 5038

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.

FDUC-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

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 elementarys who be bites where superny breden several periodic meters introducing leave technol tarial or tary s y recommunity are provided. Students work with a team of professors, classroom seachers, 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.

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.

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

Ε	ELED-6394 Systems Design & Implementation					
	This course is designed to introduce a variety of school design and redesign structures and processes to equip prospective pr9 eno w.ehvardrsitye D-63.					
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	graphing, and development conclusions will be conducted throughout the semester. Must be taken in conjunction with EDUC 5381.						
Ε	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						
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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.

FPSY-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).

English

Faculty

Victoria Aarons, Ph.D.

ENGL 1311	The Beginnings of British Literature
ENGL 1312	British Literature from the French Revolution to the Present
ENGL 1313	The Beginnings of American Literature
ENGL 1314	American Literature: Twentieth Century and Beyond
and	
ENGL 2311	Literary Methods

C. Additional requirements:

At least twenty-seven (27) hours of ENGL courses, including:

- 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: 1311, 1312, 1313, 1314, 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 120 credit hours.

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 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

The Senior Thesis

The senior thesis may be either an in depth and original piece of creative writing or an analytical argument of approximately 40 pages. The 6-hour thesis program (ENGL 4398 and 4399) may be undertaken by any English major 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 complete 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 3.7 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.

will be followed by discussion with the honors committee concerning both conception and execution of the thesis.

After evaluating the quality of the senior thesis, the Honors committee will decide whether or not to confer departmental Honors.

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-1311 The Beginnings of English Literature

An examination of British literature from its beginnings to 1800. (Offered every semester.)

ENGL-1312 British Literature From the French Revolution to the Present

An examination of the literary expressions of cultural changes from The French Revolution to the present, with a primary concentration on British writers. (Offered every semester.)

ENGL-1313 The Beginnings of American Literature Colonization to 1900

An examination of American literature from the nation's colonization and settlement to the late nineteenth century. (Offered every semester.)

ENGL-1314 American Literature: Twentieth Century and Beyond

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, thematics, 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. ds

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-3161 Early Book and Manuscript Lab

In this humanities lab, students undertake substantial original research in premodern and early modern literature. Students will learn how to transcribe and edit previously unpublished manuscripts and early print material and prepare their work for electronic publication. May be repeated for up to six credit hours. (Offered every semester.)

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: Completion of at least one English course.

ENGL-3347 The History of the Book

This course introduces students to some of the major stages in the history of the book through the seventeenth century, and to the question of how changes in this technology responded to, caused, reflected, or were otherwise related to changes in the texts these books contain. We approach the book in its entirety, examining (for example) changes in the construction and preparation of pages, new technologies for binding, and the invention of the printing press, as well as changes in scripts used to copy texts and strategies for reading these sometimes quite alien graphic signifiers. And we will consider, throughout, what careful attention to texts in their various material instantiations can offer to the study of literary history. Corequisite: ENGL 3161 or CLAS 3161

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. Students may 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: Completion of at least one English course.

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: Completion of at least one English course.

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: Completion of at least one English course.

ENGL-3346 History of the English Language

Traces the history of modern English varieties of language from the their common Indo-European origin. Emphasis upon the relation between cultural changes and changes in English vocabulary, grammar, pronunciation, and spelling. Prerequisite: Completion of at least one English course.

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: Completion of at least one English course.

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: Completion of at least one English course.

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: Completion of at least 1 English course.

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: Completion of at least one English course.

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: Completion of at least one English course.

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: Completion of at least one English course.

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 1313 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: Completion of at least one English course.

ENGL-3372 American Literature, 1900 - Present

Studies in major American writers and literary movements. May be repeated when topics vary. Prerequisite: Completion of at least one English course.

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: Completion of at least one English course.

ENGL-3475 Postmodern Literature

Major authors and issues involved with the postmodern aesthetic. (Offered every other year). Prerequisite: Completion of at least one English course.

ENGL-3480 The Modern Novel

FNGL-4304 Restoration Drama

Examines English drama from 1660 to 1800. Covers heroic drama, tragedy, comedy, and satire. Prerequisite: Completion of at least one English course.

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.

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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.) Prerequisite: Completion of at least one English course.

ENGL-4-90 Directed Studies - Senior Level

Independent study. Discretion of instructor. Prerequisite: consent of instructor

ENGL-4398 Senior Thesis I

Individual scholarly or creative projects under faculty supervision leading to the preparation of a Senior Thesis. To be taken only by prospective Senior Honors students in the first semester of their senior year. Prerequisite: Consent of instructor.

ENGL-4399 Senior Thesis II

Individual scholarly or creative projects 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. (Offered every Spring.) Prerequisite: ENGL 4398 and Consent of instructor.

Engineering Science

Faculty

<u>Farzan Aminian, Ph.D.</u>, Murchison Term Professor of Engineering Science; Chair <u>Peter Kelly-Zion, Ph.D.</u>, Professor <u>Jack Leifer, Ph.D.</u>, Associate Professor

Kevin Nickels, Ph.D., Associate Professor

 $\underline{\mathsf{Dany}\,\mathsf{Munoz}\,\mathsf{Pinto},\mathsf{Ph.D.}}\,,\mathsf{Assistant}\,\mathsf{Professor}$

<u>Joshua D. Schwartz, Ph.D.</u>, Associate Professor

Wilson Terrell Jr., Ph.D., Associate Professor

Emma Treadway, Assistant 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:

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 tomorrows, 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 3316 with a GPA of 2.0 or better.
 - B. Completion of PHYS 1311, 1111, 1312, 1112 and CHEM 1318 and 1118 with a minimum grade of C-





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 lifecycle 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 contaminates, their sources, and cleanup. Economic and legal consideration. (Offered every other year). Prerequisite: CHEM 1318candt6dbbohsqsetestanding.and t using device

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

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

Introduces students to the fundamentals of instrumentation and mechanical measurements that support thermal fluids designs. Students conduct measurements of quantities such as temperature, strain, pressure, and fluid flow. Topics include: operating principles, calibration procedure and techniques for obtaining measurements; computerized data acquisition, analysis, and visualization. Includes development of projects and other preparation for Senior Design. Oral and/or written reports are required. (Offered every Spring.) Prerequisite: Junior Standing

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, tierods, 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 Lapla **ENGR-33-temperaS** 355 Control Systems Lapla

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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

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,

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 forces vibrations of single and multiple degree of freedom systems with and without damping, structural

FNGR-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.

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

messaging to those audiences, acquiring initial customers and retaining customers. This course examines representative challenges and tools for enabling new ventures the ability to sell. Prerequisites: ENTR 3341

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---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, English

Greg Hazleton, Ph.D., Visiting Assistant Professor

Glenn Kroeger, Ph.D., Associate Professor, Geosciences

Kelly Lyons, Ph.D., Professor, Biology

Jennifer P. Mathews, Ph.D., Professor, Sociology and Anthropology

Shana McDermott, Ph.D., Assistant Professor, Economics

Troy Murphy, Ph.D., Associate Professor, Biology

Judith Norman, Ph.D., Professor, Philosophy

Richard K. Reed, Ph.D., Professor, Sociology and Anthropology

<u>David Ribble, Ph.D.</u>, Professor, Biology; Director

Heather Sullivan, Ph.D.



BIOL 2312	Cells and Cell Systems (with BIOL 2112 Cells and Cell Systems Lab)
BIOL 3413	Genes, Phenotypes, and Evolutionary Dynamics
BIOL 3434	Ecology
BIOL 3435	Evolution
BIOL 4351	Conservation Biology
CHEM 2319	Organic Chemistry I (with CHEM 2119 Laboratory Methods in Organic Chemistry)
GEOS 2400	Solid Earth Processes
GEOS 2402	Earth Surface Processes
GEOS 3310	Global Climate Change
GEOS 3411	Hydrogeology
GEOS 3421	Environmental Geochemistry

IV. Environmental Policy core (6 credit hours)

Take at least 2 of the following:

ANTH/SOCI 3345	International Issues in Health and the Environment
BUSN 3314	Sustainability and Corporate Social Responsibility: A Global Concern
ECON/URBS 3330	Economics and the Environment
ECON/URBS 3334	Urban Economics
PLSI 3413	Policy Analysis and the Policymaking Process
SOCI 3340	Urban Geography

V. Environmental Humanities and Arts core (6 credit hours)

Take at least 2 of the following:

ART 2495	Outdoor Studio
CMLT 2301	World Literature and the Environment
COMM 3323	Environmental Communication in Asia
ENVI 3301	Enviromental Literature

VI. Beyond Trinity

Although not required for the major, students are encouraged to engage in off-campus internship

opportunies or to gain experience writing grants and fundraising to support environmental not-for-profit organizations.

ALE 3301	Grant Writing and Fundraising
ENVI 4395	Environmental Studies Internship

VI. Senior Seminar in Environmental Studies (3 credit hours)

.301 Senior Seminar ir

VIII. University requirements:

Completion of all other required elements of the Pathways curriculum and at least 120 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	



Ionors in Environmental Studies	



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., Associate Professor, Human Communication and Theatre

Patrick Keating, Ph.D., Professor, Communication; Director

Curtis Swope, Ph.D., Associate Professor, Modern Languages and Literatures

Rita E. Urquijo-Ruiz, Ph.D., 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 eight 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
ML&L 3344	Russian 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
ARTH 3448	Caravaggio and Artemisia: Painting, Gender, Fiction, and Film
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; wfrienc selected

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., 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 eduation, law, geography). This BA program offers flexibility, allowing students to pursue intensive study in other disciplines.

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 (a minimum of 46 credit hours) are:

I. Required courses in geosciences:

- 3. CHEM 1318 and 1118.
- 4. At least 8 credit hours from the following list: BIOL 1311 and 1111; CHEM 3432; PHYS 1309 or 1311, and 1111; PHYS 1310 or 1312, and 1112.
- I. At least 10 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.

It is strongly recommended that students take an accredited and departmentally approved summer field geology course.

I. **University requirements**: completion of all other required elements of the Pathways curriculum and at least 120 credit hours.

The Minor

Requirements

The requirements are at least 18 hours of geoscience courses including GEOS 2400 and at least 9 hours of upperdivision geoscience courses.

Honors in Geosciences or Earth Systems Science

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 Chair before the end of the fourth week of classes during the first semester of enrollment for thesis credit. 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 produced by volcanic processes and geologic hazards associated with volcanism will be discussed. (Offered every other year.)

GEOS-1405 Oceanography

An 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

GEOS-3401 Structural Geology

וכ	EOS-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			

This course will focus on the fundamentals of groundwater, including groundwater recharge, movement, and storage. Basic concepts covered will include aquifer properties, groundwater flow, aquifer heterogeneity, well monitoring and sampling, chemical evolution of natural groundwater, and an introduction to contaminant fate and transport. The laboratory component of this course will involve data collection, manipulation, and analysis, as well as the use of physical and computational models to simulate groundwater flow and aquifer properties. Field trips are required; field trip expenses must be paid by each student. Prerequisites: GEOS 2400. Recommended: CHEM 1318 and CHEM 1118. (Offered every other year.)

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. Three class hours and three laboratory hours per week. Field trips are required; field trip expenses must be paid by each student. (Also listed as PHYS 3412.) 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,

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,

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.

GNFD-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).

GNED-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).

GNFD-1300 First Year Seminar

An interdisciplinary seminar focusing on variable themes, required of all first-year students.

GNED-1306 Energy and Society

A study of the physics and technology of energy systems and their impact on society.

GNED-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

GNED-3110 McNair Tutorial - Junior Level An examination of research design, research ethics, the presentation of research findings, and related issues for

texts will represent a variety of genres, historical moments, and linguistic traditions. Legal texts may be also be included. (Offered every other year).

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.

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	НО

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*.

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-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



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





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 econo duals, grou ner in control of the same time maintaining the econo duals, grou ner in control of the same time maintaining the econo duals, grou ner in control of the same time maintaining the econo duals, grou ner in control of the same time maintaining the econo duals, grou ner in control of the same time maintaining the econo duals, grou ner in control of the same time maintaining the econo duals, grou ner in control of the same time maintaining the econo duals, grou ner in control of the same time maintaining the econo duals, grou ner in control of the same time maintaining the econo duals, grou ner in control of the same time maintaining the econo duals, grou ner in control of the same time maintaining the econo duals, grou ner in control of the same time maintaining the econo duals, grou ner in control of the same time maintaining the econo duals, grou ner in control of the same time maintaining the econo duals, grou ner in control of the same time maintaining the econo duals, grou ner in control of the same time maintaining the econo duals, ground the same time maintaining the econo duals.

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,

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 OR
THTR 1330	Principles of Costume Technology
THTR 2310	Principles of Design OR
ART 1410	Design

c. Performance (3 Hours):

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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 1350	Introduction to Acting
THTR 2100	Stage Makeup Design
THTR 2310	Principles of Design OR
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 OR
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 contests.

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 permiss organi entdtdit

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

well as techniques for doing scholarly criticism.

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

An introductory survey of the basic theories, research, and applications aimed at understanding and improving communication across racial, ethnic, religious, and cultural differences. It focuses on local, national, and global contexts with attention to the challenges created by identity, language, and nonverbal codes in achieving mutual understanding. (Also listed as COMM 3372.) (Offered every other year.) Prerequisite: COMM 1301

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-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.

HCOM-3180 Research Lab: Healthy Relationships

This course is geared toward the development and application of advanced research skills; such as, literature review writing, study design, data collection, and manuscript writing. Students will participate in ongoing faculty-led research projects. The course will meet one hour per week, with 2 additional hours devoted to various research activities. This course will be graded on a Pass/Fail basis, and may be repeated for up to 3 credit hours. (Also listed as COMM 3180.) Prerequisites: consent of instructor.

HCOM-3440 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.

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

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, tradeshows and corporate events, and retail. Students will develop analytical and interpretive skills for devising environments that portray storylines to guests, customers, and audiences, while

THTR-2315 Scene Painting for Theatre

This course introduces students to the study of color theory, various scenic painting methods, faux finish techniques, and painting styles practiced in the theatre, film, and museum industries and beyond.

THTR-2316 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.

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 Advanced 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: THTR 2313 Intro to Scene Design or THTR 2310 Principles of Design

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-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-3336 Modern Theatre

This course explores the ways modern theatre has served as a laboratory for interrogating psychology and politics

or imagining possible worlds. Class meetings focus on important plays and manifestos, particularly those of the European avant-garde from the late nineteenth century to the middle of the twentieth. The class aims to deepen students' understanding of the stakes of experimental theatre, its relationship to modernism in literature and visual art, and the ways theatre can be understood theoretically. In addition to essays and discussions, students will give presentations that synthesize critical and creative thought. (Offered every other year.) Prerequisite: sophomore standing or consent of instructor

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-thescenes 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-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

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

scores, students will apply acting, singing, and movement to on the stage through solos, small group numbers, and large the musical theatre audition, including a focus on choosing of the musical theatre audition, and the business of musical	e ensemble pieces. In addition, the course will examine material, creating a repertoire book, the unique aspects

History

Faculty

Emilio De Antunano, Ph.D., Assistant Professor

<u>Anene Ejikeme, Ph.D.</u>, Associate Professor; Chair

<u>Jason Johnson, Ph.D.</u>, Associate Professor

<u>Erin Kramer, Ph.D.</u>, Assistant Professor

<u>Carey H. Latimore IV, Ph.D.</u>, Associate Professor

<u>David Lesch, Ph.D.</u>, Ewing Halsell Distinguished Professor of History

<u>Kenneth Loiselle, Ph.D.</u>, Associate Professor

<u>Nicole Marafioti, Ph.D.</u>, Associate Professor

<u>Gina Tam, Ph.D.</u>, Assistant Professor

<u>Lauren Turek, Ph.D.</u>, 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 5 5 i rse irements:

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.

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.

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.

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.

HIST-1301 The African Experience 2

This is an introduction to Africa since 1800. The course will use a mix of lectures and classroom discussions to study African history, focusing on Africa's connections with other parts of the world, including the Americas; topics will include the trans-Atlantic slave trade and European imperialism and the African diaspora. Reading

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 Fast 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, Purs h War olutionar, ise of ChalsolutEovem h co is

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 Early Medieval England: 500-1100

This course explores the history and culture of early medieval England, from c.500 through the eleventh century-an era traditionally known as the Anglo-Saxon period. Themes may include invasion and conquest; kingship and government; art, archaeology, and manuscript production; Old English language and literature; and religious history, notably the development of Christian practices and institutions in the British Isles. The course will be structured around student discussion, research, and writing. (Offered every other year.)

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-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.

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-2436 Native American History Since Removal

From Tonto to Moana, U.S. popular culture is filled with mythological images of Native Americans that scarcely resemble real Indigenous peoples and their complex identities. This course in modern Native American history offers a corrective to such mythologies by emphasizing the historical experiences and perspectives of Indigenous peoples. Together we will examine topics as diverse as: Indigenous slavery, the debate over U.S. citizenship, boarding schools, sovereignty and casinos, forced sterilization, and the complicated relationships with the U.S. environmentalist movement from "Iron Eyes Cody" to Standing Rock. We will explore the historical reasons why tropes likes@dploubledeline. localdoi.elines.calpschaptilises.calpschaptilises.calpschaptilises.



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-3420 Masculinity and Femininity in China, 1500-Present

This class will critically examine changing notions of masculinity and femininity in China from the Ming dynasty to the present. In it, students will grapple with the following questions: How have culture and history shaped the categories of "woman" and "man"? What are the lines we draw between these categories, have the relationships among them changed over time? How have class, status, and divisions of labor influenced the shaping of normative gender roles and sexualities, as well as actual patterns of behavior? How has gender performance interacted with the body? Who has the power to define masculine and feminine traits? (Offered every other year.)

HIST-3426 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).

HIST-3454 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.

city. Students will read representative texts from every period. (Offered every other year.)

HIST-3436 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.

HIST-3439 The World War II Fra

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.

HIST-3452 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.

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 form 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. (Also listed as ECON 3342.) Prerequisite: ECON 1311 and 1312

Upper Division - United States History

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-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 lease 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

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 lease 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

allows us to consider from many historical angles: why the right to free speech and petition was the first freedom enshrined in the Bill of Rights, how individuals interpreted and attempted to expand the definition of "we the people," and what role a free press played in the founding of the United States. After taking this course, you will have a historical basis for understanding the ethical, social, and political questions raised by the rights enshrined in the First Amendment that continue to shape public discourses today. (Offered every other year.)

Historiography, Thematic, and Comparative History

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-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).

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-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-3-90 Independent Study

Independent study in selected areas. 1 to 6 semester hours. Prerequisites: 6 advanced hours in history and

consent of instructor.

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). Prerequisite: Consent of the internship coordinator and the History Department chair.

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 reading 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

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		

Interdisciplinary Second Major



(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. The selection of courses must ensure depth in the area of study as well as breadth of exposure to varied		

International Studies

F	a	Cl	اد	ty

Dania Abreu-Torres, Ph.D.

International Development: Professor Katsuo Nishikawa Chávez*
Concentration Course Requirements
Concentrations (*coordinator and head adviser)

ANTH 3452	Global Cities: Africa, Asia, and the Americas
ANTH 3464	Morality in the Marketplace
ANTH 3445	Understanding Refugees (also listed as SOCI 3445 and URBS 3445)
ECON 3333	Health Economics
ECON 33343	Slavery and the Atlantic Economy (also listed as HIST 3343)
INTL 3316	Gender, Race and Healthcare in Contemporary Cuba
PLSI 1331	Global Politics
PLSI 3333	Latin American Politics
PLSI 33334	State, Society, and Change in the Middle East
PLSI 3441	East Asian Security
PLSI 3448	International Human Rights
PLSI 4341	International Political Economy
RELI 3403	Death and Beyond
SOCI 1110	Service Learning: Homelessness
SOCI 1310	Urban Experience
STOCI 2816, Society,	and Change in the Maidl1 0
SOCI 3327	Race in America
SOCI 3329 SOCI 33	329 SOCI 3329 SOCI S nder

PHIL 1350	Environmental Ethics
PHIL 1354	Ethics
PHIL 2456	Applied Ethics
PHIL 3459	Biomedical Ethics
WAGS 2351	Introduction to Queer Studies
WAGS 2352	Introducation to Gender Studies
WAGS 3401	The History of Sexuality

Natural Sciences

BIOL 2306	Infectious Diseases
BIOL 3413	Genes, Phenotypes, and Evolutionary Dynamics
BIOL 1322	Ecology and Bioconservation in China

Methods

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)
ALE 3301	Grant Writing Fundraising
ANTH 3365	Research Methods; GIS (also listed as SOCI 3365)

Diplomacy, Security, War, and Peace Studies (Professor Rosa Aloisi*)

Description: The Concentration in Diplomacy, Security, War, and Peace Studies offers students the opportunity to develop a cultural, historical and political perspective on the interactions among nations. Students will focus on

- 1) PLSI 1342 Introduction to International Politics
- 2) Reseach Methods (one of the following courses)

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)
ALE 3301	Grant Writing and Fundraising
ANTH 3365	Research Methods: GIS (also listed as SOCI 3365)
PLSI 3372	Research Methods in Political Science

3) No fewer than 15 credit hours, at least nine of which must be upper division, distributed across the following topical areas

Humanities (at least two courses)

HCOM 2330	Conflict and Human Communication
HCOM 3372	Intercultural Communication
HCOM 3374	International Communication
HCOM 4350	Political Communication
CMLT 2301	World Literature and the Environment
CHIN 3330	Global Business Culture
CHIN 4364	Internationalizing Intellectual Property
HIST 1300	The African Experience
HIST 1324	Modern East Asia
HIST 1334	Modern Europe
HIST 1340	Latin American Cultural Tradition
HIST 1351	The Modern Middle East
HIST 2432	European Frontiers 1868-Present
HIST 3300	Gender Matters in African History
HIST 3304	Religion in African History
HIST 3320	The Rise of Modern China



PLSI 2432	Film, Literature, and Politics of the Third World
PLSI 3333	Latin American Politics
PLSI 3434	State, Society, and Change in the Middle East
PLSI 3435	Global City Berlin*
PLSI 3441	East Asian Security
PLSI 3442	International Law
PLSI 3446	War and Alliance
PLSI 3447	International Criminal Justice*
PLSI 3448	International Human Rights
PLSI 3430	European Politics
PLSI 4341	International Political Economy
PLSI 3444	The Middle East and the World
PLSI 3441	East Asian Security

Environmental Studies (at least one course)

ENVI 1301	Introduction to Environmental Studies
ENVI 3302	Environmental Literature
GEOS 1307	Geology, Resources, and Environmental Issues of China and Southeast Asia
GEOS 1409	Earth's Environmental Systems
GEOS 3310	Global Climate Change

International Development (Professor Katsuo Nishikawa Chávez*)

Description: Students in the International Development concentration will gain a deep understanding of issues that communities face in the pursuit of development. Students will study contemporary social issues and foundational

ANTH 3365	Research Methods: GIS (also listed as SOCI 3365)
ANTH/SOCI/URBS 3460	Research Methods: Applied Social Statistics
HCOM/COMM 3354	Quantative Research Methods
PLSI 3372	Research Methods in Political Science

2) Contemporary Issues and Critical Understanding (at least six credits)

ANTH/SOCI 3327	Race in America
ANTH/SOCI 3345	International Issues in Health and the Environment
ANTH/SOCI 3431	Language, Culture, & Society
ANTH/SOCI 3449	Globalization & Social Change
ANTH/SOCI/URBS 3445	Understanding Refugees
ECON 1311	Principles of Microeconomics
ECON 1312	Principles of Macroeconomics
ECON 3318	The Global Economy
ECON/URBS 3330	Economics and the Environment
ECON/URBS 3334	Urban Economics
ECON 3340	

HCOM 1170 L	_eadership Academy
HCOM 1333 P	Public Speaking
HCOM 3360 C	Communicating in Small Groups & Teams
HCOM 2330 C	Conflict and Human Communication
HCOM 3362 0	Organizational Communication
HCOM 3364 C	Communication and Effective Leadership
HCOM 3372 Ir	ntercultural Communication
INTB 2301 Ir	nternational Busn Environment
MGMT 2301 N	Management of Organizations
MGMT 3372 O	Organizational Behavior
MKTG 2301 P	Principles of Marketing

The Senior Experience

The Senior Experience offers various ways for students to reflect on and unify their interdisciplinary coursework in International Studies.

The Minor

The requirements for a minor in International Studies are as follows:

- I. Completion of no fewer than 21 credit hours. At least 9 hours shall be lower division; at least 12 hours must be upper division.
- II. The lower division sequence in an appropriate foreign language (the equivalent of four college semesters).
- 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. Concentrations (12-15 hours including courses taken while abroad). International Studies concentrations are individual programs of study designed by students in consultation with the appropriate assigned adviser. A student may select 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.
- V. At least one semester abroad program approved by the International Studies committee or alternatively an approved summer program or a "beyond the classroom program." Summer programs or "beyond the classroom

programs" listed in the concentrations are clearly marked with an asterisk. A student may propose an unlimited summer program or beyond the classroom program taken at Trinity with the approval of the adviser and program director.

While not required students may select the Internship Course option (INTL 4-01; maximum 3 hours)

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/Fai						

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. (Also listed as ANTH 3301 and SOCI 3301.)
INTL-4-01 International Studies Internship
Between zero and six hours of credit may be arranged for appropriate international internships that are undertaken

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. (Also listed as BUSN 3315, ECON 3315, GEOS 3315, and PLSI 3315.) (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.

INTL-3316 Gender, Race and Healthcare in Contemporary Cuba

This course explores the historical changes that have labeled Cuba as an island "lost in time" by focusing on three topics that are crucial for Cuba's global acknowledgement: gender, race and healthcare. These topics are deeply interrelated and in constant exchange with Cuba's economy and politics, as women and LGBT communities challenge their social participation, Afro-Cubans claim their space, and healthcare becomes threatened due to Cuba's slow movement to globalization. (Offered every other year.) Prerequisites: SPAN 2301 and Consent of Instructor

INTL-3357 Contemporary Japanese Politics and Society

This is a faculty-led, study abroad course that includes summer travel to Japan. The course exposes students to (A) Japan's historic and contemporary socioeconomic position in the region, (B) Japan's role as the technological and business innovation-hub of Asia, and (C) the rich fabric of Japanese culture, both traditional and contemporary. Students will mose the Cuba'a (Book of the rich fabric of Japanese culture) and traditional and contemporary.

L	AC-3108 Tradiciones Culturales En América Latina
	This is a companion course to HIST 1340, Latin American Cultural Traditions. It offers students the opportunity to
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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 cinematographique (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 Republica Dominicana: Una Introduccion (An Introduction to the Dominican Republic)

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. (Also listed as BUSN 3340.) Prerequisites: ECON 1311, Spanish proficiency, and consent of instructor.

LAC-3343 Relaciones fronterizas 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)

PSYC 3431 Memory and Cognition

Sociology and Anthropology

ANTH 3331	Language, Culture, and Society (also listed as SOCI 3331)	
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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 i de rganizations), the i

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 Mathematics for Data Science

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-3310 The Mathematics Peer Educator

Peer tutoring or peer-led instruction in a mathematics course. Under the guidance and supervision of the course instructor, peer educators will assist students in learning mathematics concepts and in developing problem solving skills. Office hours and class attendance required. Course may be repeated for a maximum of 6 credit hours. Prerequisite: Consent of instructor

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 3330 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.

MAETH 3383841072 authornoilli texnd ISciences

This course covers the basic53334 Lexnd IGand logil34 y. es i Lexnd IGans, h expe y y. 134 nd h ar ealgebra.

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 programing; 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-Liouvulle 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, Rouche'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

Michael Ward, Ph.D., Associate Professor, Modern Languages & Literatures

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 3347	The History of the Book (MR)
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)

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	Michelango: 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 3161	Early Books and Manuscripts Lab (MR)
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	

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; Director Julio Roberto Hasfura-Buenaga, Ph.D., Associate Professor, Mathematics John H. Huston, Ph.D., Professor, Economics 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	Corporate Finance
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	Investments I
FNCE 3353	Investments II
FNCE 3363	Student Managed Fund I
FNCE 3361/ECON	

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., Lecturer, 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., Assistant Professor, Spanish

Debra Ochoa, Ph.D., Associate Professor, Spanish

Nicholas Reynolds, Ph.D., Lecturer, German

Bladimir Ruiz, Ph.D., Associate Professor, Spanish

J'Leen Manning Saeger, Lecturer, Spanish

Heather Sullivan, Ph.D., Professor, German

Curtis Swope, Ph.D., Associate Professor, German

Rita E. Urquijo-Ruiz, Ph.D., Professor, Spanish

Carlos Martin Velez Salas, Lecturer, Spanish

Michael Ward, Ph.D., Associate Professor, Spanish

Ginger Wu, Ph.D., Lecturer, 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.

Global Latinx Studies is an interdisciplinary analysis of the Latinx experience from the past to the present, in an interdisciplinary space that includes modern languages, and spans the humanities, the natural sciences, and the social sciences. The major encompasses, but is not confined to, the communities of the Americas, the Iberian Peninsula, and the Caribbean. It especially focuses on the Latinx diasporas throughout the world, including communities with a shared colonial past with Spain and Portugal.

Students develop their knowledge of and commitment to Latinx Studies through coursework in leadership development, intercultural capacities, and linguistic fluency as well as disciplinary courses in history, economics, cultural studies, and religion.

In addition, the program fosters close ties between the University and the Latinx community in San Antonio through internships, service-learning, and other opportunities. Majors are strongly encouraged to participate in study-abroad programs.

A signature aspect of the major will be a senior portfolio that ties together the many strands of a Global Latinx

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. Three upper division credit hours in another language plus six additional credit hours in other courses approved by the major advisor and the department chair.
- 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 120 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. Three upper division credit hours in another language plus six additional credit hours in other courses approved by the major advisor and the department chair.
- II. University requirements: completion of all other required elements of the Pathways curriculum and at least

120 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	

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 120 credit hours.

Global Latinx Studies

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

34 credit hours, at least 18 of which must be upper division.

I. Language requirement:

SPAN 2302 or higher (with a grade of C or better).

II. Core courses:

Choose 9 credits from this list of core courses:

ARTH 1412	Art and Architecture of Latin America
EDUC 3344	TeaO

ARTH 3461 Public Art Across the Border

ARTH/ANTH 3335 Pre-Columbian Art Mesoamerica

INTL 3134 Culture, Id, & Lang in Brazil

LAC 3308

- RUSS 4-91
- RUSS 4398
- RUSS 4399
- LAC 3111
- Appropriate study-abroad or domestic immersion courses as approved by the major advisor and the ML&L department chair
- B. Completion of one of the following additional requirements:

Nine additional credit hours of upper division courses in Russian from the above list OR

Nine credit hours from the following courses:

- ML&L 3342
- ML&L 3343
- ML&L 3344
- ML&L 3401
- ARTH 3362
- HIST 3338
- HIST 3339

Appropriate study-abroad or Trinity courses as approved by the major advisor and the ML&L department chair.

Three upper division credit hours in another language plus six additional credit hours in other courses approved by the major advisor and the department chair.

II. University requirements: completion of all other required elements of the Pathways curriculm and at least 120 credit hours.

Spanish

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

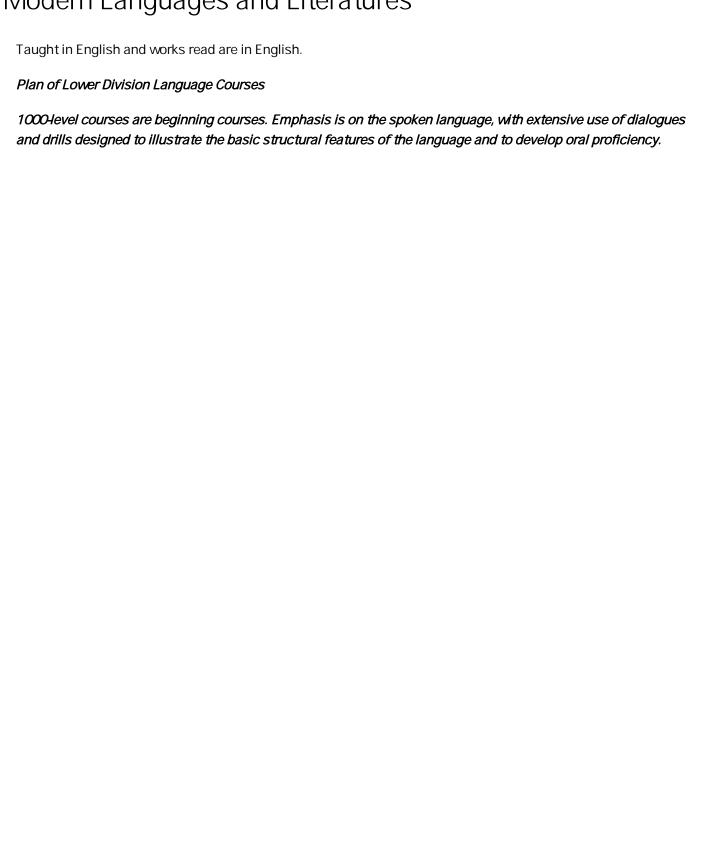
I. Departmental requirements:

A. Completion of 21 hours, of which no more than 3 mat 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:

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 Three upper division credit hours in another language plus six additional credit hours in other courses approved by the major advisor and the department chair.

Modern Languages and Literatures



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, scholarship and film will be vehicles of entry into the universe of a language classified by UNESCO as "seriously endangered." (Also listed as GRST 3401.) (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



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

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 viruses 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 aps s an independ

listed as BUSN 4130 and LAC 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 form 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 and 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.

CHIN-3314 Chinese Literature in Translation

This course provides an in-depth study in at least one of these genres in classical and modern Chinese literature through English translations: poetry, fiction, non-fiction, and drama. Major literary forms, themes, and rhetorical devices will be covered, as well as issues in literary translation. (Offered occasionally.)

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.

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.

FRFN-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.

FRFN-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

GFRM-3301 Advanced German L

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.

GFRM-3305 Introduction to German Literature and Culture L

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

GFRM-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). Prerequi ill drawO

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

ring World War II. Special attention will be paid to the motivations and actions of the perpetrators, the	

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 democracypean

the Reformation, the discovery of the Americas, and the impact of Italian art, are explored through the work of Dürer, his contemporaries, and his followers, including Grünewald, Cranach, and Holbein. The class will include a field trip to study Dürer prints at the Blanton Museum of Art in Austin. (Also listed as ARTH 3444.) (Offered occasionally.) Prerequisite: Completion of one course in Art History, or sophomore standing, or consent of instructor.

Global Latinx Studies

GLXS-4100 Senior Portfolio

This course is intended for seniors who are majoring in Global Latinx Studies. Majors are required to complete a portfolio as a reflective assignment that analyses two main themes: power relationships and diversity and inequality. Students will reflect on how GLXS will serve them in the future. (Offered every semester.) Prerequisites: Senior standing in GLXS Major

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 I

Prerequisite: ITAL 1402 or the equivalent, or consent of instructor.

ITAL-2302 Intermediate Italian II

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.

BALLAGGI ARIOS + SSP2800 lin Primissian Russian II

RUSS-3301 Advanced Russian I

An intensive review of Russian grammar ammar ammar , fro ammaq Prere o work Prerequisite: RUSS 230

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 L

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 adquire 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.

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 "Rtithe peews, and Muslims during literatnis insh Ameter tes, ursens ructol attentio(...)

Prerequisite: SPAN 3330 or SPAN 3331 or consent of instructor.
SPAN-4334 Nineteenth-Century Spanish Literature
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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.	

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).

Museum Studies

Faculty

<u>Douglas Brine, Ph.D.</u>, Associate Professor, Art and Art History

<u>Ms. Colleen Hoelscher</u>, Assistant Professor, Library

<u>Carey H. Latimore IV, Ph.D</u>, Associate Professor, History

<u>Jennifer P. Mathews, Ph.D.</u>, Professor, Sociology and Anthropology

<u>Kathryn O'Rourke, Ph.D.</u>, Associate Professor, Art and Art History

<u>David Ribble, Ph.D.</u>, Professor, Biology

<u>Robert F. Scherer, Ph.D.</u>, SPHR, Dean, School of Business

<u>Lauren Turek, Ph.D.</u>, Assistant Professor, History; Director

Overview

The Museum Studies minor provides foundational knowledge of the history, theory, and practice of museums and their collections. Students learn to think critically about how museums and their collections have defined history, culture, and art. The minor also introduces students to practical skills in museum management, educational

ARTH 2431	This is America: Rethinking American Art at the San Antonio Museum of Art
ARTH 3452	19th Century Architecture
BAT 1101	

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., Professor
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 success-fully 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

Electives sufficient to achieve 60 hours outside the Department.				

IV. University Requirements: completion of all other required elements of the Pathways curriculum and at least 124 credit hours.

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).

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
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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.

MUSF-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.

MUSF-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: MACO (INCOME) MACO (INCOME) 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 pr sity | Ccto y on t

sites: MUS

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-3203 Composition

Weekly private composition lessons focusing on short forms for voice and chamber ensembles. Prerequisites: MUSC 2204 and consent of instructor.

MUSC-3204 Composition

Weekly private composition lessons focusing on short forms for voice and chamber ensembles. Prerequisites: MUSC 2204 and 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-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-4202 Composition

A continuation of MUSC 3203, 3204. Composition in larger forms and for larger aggregations of voices and instruments. Prerequisites: MUSC 3204 and consent of instructor.

MUSC-4203 Composition

A continuation of MUSC 3203, 3204. Composition in larger forms and for larger aggregations of voices and instruments. Prerequisites: MUSC 3204 and 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

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	

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 or 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,



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

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

Neuroscience

Faculty

<u>Gerard Beaudoin III, Ph.D.</u>, Assistant Professor, Biology

<u>Kwan Cheng, Ph.D.</u>, Williams Endowed Professor in Interdisciplinary Physics, Physics and Astronomy

<u>Laura M. Hunsicker-Wang, Ph.D.</u>, Professor, Chemistry

<u>Kah-Chung Leong, Ph.D.</u>, Assistant Professor, Psychology

<u>Dany Munoz Pinto, Ph.D.</u>, Assistant Professor, Engineering Science

<u>Kimberley Phillips, Ph.D.</u>, Professor, Psychology; Director

Overview

BIOL 3459	Endocrinology
BIOL 3466	Cell Biology
Chemistry	
CHEM 3330	Biochemistry I
CHEM 4347	Advanced Interdisciplinary Topics: Neurochemistry
Neuroscience	
NEUR 3310	Neuroethics
NEUR 4390	Research in Neuroscience
Philosophy	
PHIL 3431	Philosophy of Mind
PHIL 3432	Philosophy of Science
PHIL 3459	Biomedical Ethics
Physics	
PHYS 3311	Principles of Biophysics
Psychology	
PSYC 2330	Fundamentals of Cognition
PSYC 3311	Sensation and Perception
PSYC 3312	Principles of Learning
PSYC 3431	Memory and Cognition
PSYC 3340	Psychopathology

II. University Requirements: completion of all other required elements of the Pathways curriculum and at least 120 credit hours.

Guidelines for Acceptance of Majors

Full acceptance in the major is granted when the following requirements are met:

- 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 Neuroscience major.

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 NEUR 4395 and NEUR 4396.

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 or Corequisite: NEUR/PSYC 2310.

NFUR-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 acquired 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 3413, NEUR 2310, and CHEM 2319, 2119

NEUR-3-90 Lab Experience in Neuroscience

This course is designed to provide students the background skills and experiences needed to conduct research in Neuroscience. Students will engage in research-related activities including reading empirical manuscripts, data collection and transcription, data analysis, and learning project protocols. May be repeated up to a maximum total of 6 credit hours. (Offered every semester.) Prerequisite: Consent of instructor, and NEUR 2310.

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-4390 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. (Offered every semester.) Prerequisites: Consent of instructor, and NEUR 3-90.

NEUR-4395 Thesis I

This course provides an opportunity for independent research and scholarly investigation in conjunction with

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"

ART 3380 Advanced Digital Art *COMM 3340

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

ndependent study or research, or advanced selected topics in physical education that are not covered in other	

use to protect them from aggressive acts that they may encounter.

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-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.

PHFD-1125 Golf II

Review of fundamentals of golf. Participation at pitch and putt and local golf courses.

PHFD-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.

PHFD-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

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.

PHFD-1151 Ballet I

History of ballet, basic technique, vocabulary, combinations and style. Local concerts and critiques.

PHFD-1152 Ballet II

Advanced ballet technique, center combinations and variations. Comparison of major companies and performers.

PHFD-1153 Ballroom Dance L

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.n waltz,

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-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
Andrew Kania, Ph.D., Professor
Steven Luper, Ph.D., Professor
Judith Norman, Ph.D., Professor, Chair
Ronni Gura Sadovsky, Assistant Professor

Requirements

- The Major
- The Minors
- <u>Departmental Honors Program</u>

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 4491	Seminar on a Philosophical Problem
PHIL 4492	Seminar on a Philosopher
PHIL 4493	Seminar on a Philosophical Movement
PHIL 4395	Senior Thesis

II. University requirements: completion of all other required elements of the Pathways curriculum and at least 120 credit hours.

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

PHIL 3454	Philosophy of Gender
PHIL 3459	Biomedical Ethics

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

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 th9 mdhe

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 Knowledge, Reality, and the Good Life

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 evaluatinnee av redibility 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).

PHII -1354 Fthics

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 1359.) PHIL 1354 and PHIL 1359 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

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

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 or moral principles and judgments, intrinsic and extrinsic value, consequentialism and deontology, moral relativism, natural rights, theories of justice. Prerequisite: Any course in

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, **35**67086674 will investigate san Assety of ipsatuse or and weed is gain that in the cot of total ucs tlymUSq0 hianims, ar

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 of 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 po byhich they



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

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.

The Minor in Astronomy

The minor in astronomy will consist of 19 credit hours. Of those, 10 hours will include:

PHYS 1103	Observatory Astronomy
PHYS 1304	Solar System Astronomy
PHYS 1305	Stars and Galaxies
PHYS 1310 or 1312	General Physics II or Introduction to Electricity, Magnetism

Three hours will include:

PHYS 3350	Intermediate Astronomy
PHYS 4350	Astrophysics

The remaining 6 upper-division hours are chosen from the following:

GEOS 3307	Planetary Geology
PHYS/GEOS 3412	Applied Geophysics
PHYS 3321	Statistical Physics and Thermodynamics
PHYS 3322	Classical Mechanics and Nonlinear Dynamics
PHYS 3323	Introduction to Modern Physics
PHYS 3324	Math Methods in Physics
PHYS 3325	Waves and Optics
PHYS 3348	Atmospheric Physics

PHYS 3128	Summer Research II
PHYS 4128	Summer Research III
PHYS 3-90	Directed Studies Junior Level
PHYS 4-90	Directed Studies Senior Level
Students may also choose one releva	nnt 3-hour-upper-division course approved by the department

The combined total of hours for 3128, 4128, 3-90, or 4-90 may not exceed 3 hours for the minor. The chair of the Department of Physics and Astronomy must approve the selected content of 3128, 4128, 3-90, or 4-90 as relevant to the minor in astronomy.

PHYS-1302 Frontiers of Physics

An introduction to the methods and results and philosophical implications of modern physics. Topics include: special and general relatively; the wave-particle theory of light and matter; atomic, nuclear and particle physics; future explorations.

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

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 Summer Research I

Individual research participation during the summer research term under faculty supervision. (Offered every semester.) Prerequisite: Consent of Department Chair

PHYS-2231 Sophomore Experimental Physics

Rigorous experimental work, including data handling and scientific writing. Experiments are drawn from the areas of mechanics, optics, nuclear, and modern physics. Meets 3 hours per week, with significant work outside of the laboratory. (Offered every Spring.) Prerequisites: PHYS 1111, 1112, 1312 (or 1310)

PHYS-3128 Summer Research II.

Individual research participation during the summer research term under faculty supervision. (Offered every semester.) Prerequisite: PHYS 2128 and Consent of the Department Chair.

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-3311 Principles of Biophysics

This course introduces the use of physics principles to explore and understand complex biological systems on different spatial and time scales. Questions addressed include: What are the forces that hold a molecule and a cell together? What are the forces and energies involved in cell membrane structures and functions, DNA packing and functioning, protein folding, and nerve-signal transmission? Emphasis will be placed on the use of spectroscopic, imaging and computer simulation techniques to address some of these questions. This course spans the molecular, cellular and tissue levels of biology and examines current topics of biophysics. (Offered every other year.) Prerequisites: PHYS 1310 (or PHYS 1312) and one of the following courses: CHEM 3330, ENGR 3327, or PHYS 3323

PHYS-3321 Statistical Physics and Thermodynamics

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. (Also listed 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-4128 Summer Research III

Individual research participation during the summer research term under faculty supervision. (Offered every semester.) Prerequisite: PHYS 3128 and Consent of the Department Chair.

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-4221 Flectronics Lab

Rigorous experimental work covering RLC circuits, diodes, transistors, oscilloscopes, logic gates, and operational amplifiers. There will be a significant expectation for work outside of class, whether on prelab preparation, circuit building, or assignments for practicing specific skills. Meets 3 hours per week, with significant work outside of the laboratory. (Offered every other year.) Prerequisites: PHYS 2231

PHYS-4231 Advanced Photonics Lab

Advanced experimental techniques covering topics typically not addressed in coursework. Rigorous analysis of experimental data and competent scientific writing form an integral part of the course. Topics include: atomic physics, advanced optics, laser physics, and nanotechnology. There will be a significant expectation for work outside of class, including pre-lab and writing activities. Meets 3 hours per week, with significant work outside of the laboratory. (Offered every other year.) Prerequisites: PHYS 2231

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 storing to the contents with also prepare an individually researched assignment on a subject of their choice exploring an emerging technology in the electrical engineering area. (Also listed as LEIN GR2) 4298 04 to the contents it is the contents with the contents with the contents are properties as the contents of the contents it is the contents with the contents with the contents are properties as the contents are properties as the contents are properties as the contents are properties and the contents are properties as the contents are properties and the contents are properties as the contents are properties and the contents are properties as the contents are properties and the contents are properties are properties and the contents are properties and the contents are properties and t

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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. A written summary of results and presentation at a department seminar are required. Required of all B.S. Physics Majors. (Offered every semester.) 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. A written summary of results and presentation at a department seminar are required. Required for honors in physics. (Offered every semester.) Prerequisite: Senior standing.

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., Associate Professor

David A. Crockett, Ph.D., Professor; Chair

Jesse Crosson, Assistant Professor

John R. Hermann, Ph.D., Associate Professor

Katsuo A. Nishikawa Chávez, 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

II. An overall grade point average of at least 2.0. 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.

This is the basic introductory course in international relations. (Offered every semester)

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)

PLSI-2150 Trial Procedure and Argumentation

An experiential study of courtroom trial and procedure. Students research and analyze elements of case law, rules of evidence, and persuasive argumentation. This study culminates in the preparation and performance of fully simulated trials, with students filling the roles of attorneys and witnesses. Offered in conjunction with participation in the Mock Trial program. May be repeated for no more than six credits. (Offered every semester.) Admission by consent of instructor only.

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 organiUnnof ins

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udies communication aspects of the political processes in a democratic society with an er ntemporary political campaigns; presidential and congressional rhetoric; and less public fo	

A comparative survey of government and politics in Latin America, focusing on illiberal democracies, political participation, and clientelism in the region.

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-3434 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-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. (Also listed as GRST 3435.)(Offered every other year)

Upper Division - International Politics

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



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 A s elopment.

Through the analysis of forms of artistic expression and contemporary questions about human rights violations, this course will assess the impact performance has on the understanding of human rights violations, on the reconciliation of societal conflicts and on the restitution of human dignity to victims of repression. This course typically includes a study abroad component. (Also listed as THTR 3444.) Prerequisite: Consent of Instructor

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 Wollenstonecraft 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,

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. (Also listed as BUSN 3315, ECON 3315, INTL 3315, and GEOS 3315.) (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 from the 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. One course in each of the following clusters:
 - 1. Basic Physiological and Perceptual Processes: 2310, 3311
 - 2. Developmental Psychology: 2320, 2350, 3321, 3322

- 3. Social and Clinical Psychology: 2341, 3340, 3342
- 4. Learning, Memory & Cognition: 2330, 3312, 3431
- D. At least 18 credit hours must be at the upper-division level.
- E. 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 120 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

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:

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 quidelines. Prerequisites: PSYC 4395; consent of instructor.

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. May be taken for 1 or 2 credit hours. This course may be repeated once. (Offered every semester.) Prerequisite: Consent of instructor and PSYC 1300

PSYC-3-80 Psychology Peer Tutor

Peer tutoring in a psychology course for either 1 or 2 credits. Under the guidance and supervision of the course instructor, tutors will assist students in learning psychological concepts and related skills taught in the course but will have no grading responsibilities. Office hours and possibly class attendance required. The instructor will determine the number of credits available. (Offered Occasionally.) Prerequisite: PSYC 1300 and consent of instructor

Religion

Faculty

Kimberly Bauser McBrien, Visiting Assistant Professor

Gregory Clines, Assistant Professor

Ruben R. Dupertuis, Ph.D., Associate Professor; Chair

Sajida Jalalzai, Ph.D., Assistant Professor

Matthew Milligan, Ph.D , Visiting 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., 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: Religion Capstone.
- 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 120 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-1340 Judaism, Christianity, and Islam

This course is an introduction to Judaism, Christianity, and Islam, surveying their formative histories, scriptures, and core beliefs and practices-with each religion taken on its own terms but also considered in comparison and connection with these and other Western traditions. (Offered every Fall.)

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

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-3415 Economics of Religion

This class surveys how market forces have both shaped institutionalized religion(s) and have also been shaped by institutionalized religion(s). Religion has often been studied and portrayed as either extremely hostile toward economic concerns and practices or radically fundamental to such concerns and practices. In this class, students will think of a middle way between these extremes and investigate ways religious and economic forces are intertwined in premodern and modern contexts. Learning old and new theories pertaining to the economics of religion, students will take a deep dive into three case studies from around the world to deploy the theories. (Offered every other year.) Prerequisite: 1 course in Religion or consent of the 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.) (also listed as CHIN 3433.) Prerequisite: RELI 1330 or consent of instructor.

RELI-3434 Japanese Literature of the Spirit World

An examination of Japanese religions through the lens of Japanese literature, focusing on the modern period. The course will focus on Japanese consciousness, whether this is expressed as supernaturalism (ghost stories and other supernatural phenomena), religiously inspired aesthetic form (in poetic genres), mystical experience (in Japanese magical realism), or religious vocation (monastic practice and new religious movement). (Offered every other year.) Prerequisite: RELI 1330 or consent of instructor.

RELI-3435 Nonviolent Warriors: Jainism in South Asian Religious History

This course examines the religious beliefs and practices of the Jains, a minority tradition in India that has had a profound impact on the religious, philosophical, artistic, and literary landscapes of South Asia. Beginning with the teachings of Lord Mahavira and the basic doctrines of Jainism, the course will consider the historical foundations of the Jain tradition through philosophical and doctrinal texts and the rich corpus of Jain narrative literature. The course highlights how Jains, alongside their better-known Hindu, Buddhist, and Muslim counterparts, participated in and contributed to every major religious and philosophical innovation in South Asian history, including tantra, yoga, and bhakti devotionalism. The course will also focus on contemporary Jain life and religious practice, both monastic and lay, through examination of the religious lives of ascetics and Jain laity, ritual practices of temple worship and pilgrimage, as well as sectarian movements within the tradition and the emerging Jain interest in environmentalism. (Offered every other year.) Prerequisite: RELI 1330

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.

RFI I-3442 Global Christianities

A study of Christianity within its modern socio-historical contexts. Possible topics within the course include the development of indigenous Christainites 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-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 gid equisit

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.

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 American Religions

This course will explore a wide variety of African American faiths that have grown into a diversity of religious traditions in the United States. This will include but not be limited to: African American Christianity, Voodou, Hoodoo, Conjure, Black Hebrews, Santeria, Nation of Islam, Father Divine and more. The goal of this class will be to introduce students to a variety of Afro-American traditions, explore issues of race and power within religious institutions, examine how African Americans have adapted to the American religious marketplace, and expose students to a variety of methods in the field of religion. (Offered every other year.) 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

Upper Division Courses at the 4000 Level

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). This course is normally taken in the Junior or Senior year. Prerequisite: 4 courses in Religion

Scientific Computing

Facul	ty
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Farzan Aminian, Ph.D.

The Core (9 hours)

I. Computation

CSCI 1320	Principles of Algorithm Design
CSCI 2323	Scientific Computing

II. Calculus

ATH 1311	Calculus 1
AIIIISII	Calculus

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		

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., Associate 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., Professor, Vice President for Student Life

Requirements

The Major

- 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 23 hours must be in upper division anthropology courses chosen in consultation with the adviser. At least 27 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 120 credit hours.

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.

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;

- 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.)

SOCI-2435 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

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-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,

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-3-91 Special Topics Seminar

Topics will vary according to faculty and student interest. A student may repeat the course if the topics change

SOCI-3431 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 3431.)(Offered every other year.)

SOCI-3449 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 ANTHr844%)e(Offered every other year.) Prerequisites: At least 3 hours completed in ANTH, ECON, PLSI, or SOCI.

SOCI-3465 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 3465). (Offered every year.) Prerequisite: SOCI 3359 or ANTH 3359

SOCI-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 coE h l tance of

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 3440.) Prerequisite: At least 3 hours completed in Sociology.

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-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-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 SOCI 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 SOCI 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-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.)

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 or 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.

Consent of instructor and Senior standing.

ANTH-3431 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 3431.)(Offered every other year.)

ANTH-3449 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 3449.) (Offered every other year.) Prerequisites: At least 3 hours completed in ANTH, ECON, PLSI, or SOCI.

ANTH-3465 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 3465.) (Offered every year.) Prerequisite: ANTH 3359 or SOCI 3359.

ANTH-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. (Also listed as INTL 3301 and SOCI 3301.)

ANTH-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 criminologist 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.)(Also listed as SOCI 3424.) Prerequisite: At least 3 hours completed in Sociology

ANTH-3427 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.) (Also listed as SOCI 3327.) Prerequisite: At least 3 hours completed in SOCI, ANTH, or PLSI.

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., Associate Professor
Jared, Koreff, Ph.D., Assistant Professor
Julie Persellin, Ph.D., Associate Professor, Chair
John Daniel Rice, J.D., Associate Professor

Department of Business Administration

<u>William T. Burke III, J.D.</u>, Associate Professor <u>Mario Gonzalez-Fuentes, Ph.D.</u>, Associate 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

<u>Jacob K. Tingle, Ed.D.</u>, Assistant Professor of the Practice of Business Administration; Co-Director of the Center for Experiential Learning and Career Success

<u>Deli Yang, Ph.D.</u>, Neidorff Family/Centene Corporation Endowed Professor; Associate Dean of the School of Business Orhan Volkan Ozbek, Ph.D., Assistant Professor

Department of Finance and Decision Sciences

<u>Jorge Colazo, Ph.D.</u>, Associate Professor; Chair <u>Tianxi Dong, Ph.D.</u>, Assistant Professor

Eugenio Dante Suarez, Ph.D., Associate Professor

Diana Young, Ph.D., Assistant Professor

Mauro Gonzaga de Oliveira, Ph.D., Assistant Professor

Karl Pichler, Prassel Professor



abroad prior to their junior year or during a summer.

- Junior: Fall semester ACCT 3341, ACCT 3343; Spring semester ACCT 3342, ACCT 3344.
- Senior: Fall semester ACCT 4344; Spring semester ACCT 4697, ACCT 3303, and BUSN 4301.
- Note that a student intern will be enrolled for only 12 hours during the spring semester of the

Completion of this major involves the general requirements for admission, the core business curriculum, other general requirements and:

- Required courses (15 hours): MGMT 3361, FNCE/ECON 3361, MKTG 3361, INTB 3361, INTB 4361
- 2. International Business electives (6 hours):
 - I. At least 3 hours from INTB 3330, 3363, 3365, 4362, and/or BUSN 3340
 - II. Interdisciplinary international electives: COMM 3322/HCOM 3374, ECON 3318, 3347, FNCE 3348, and INTB 3346

- 2. Business analytics and technology major requirements (4 courses; 10 hours): BAT 3303, 3305, 4102 and 4301
- 3. Nine credit hours of electives (9 hours).

Although students may choose any combination of courses, depending on whether they are interested in Data Science or Supply Chain Analytics they would typically choose their nine hours from either one of the following two groups:

Interest in Data Science:

Graduate Degree

A. 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,

ACCT-5343 Seminar in Advanced Federal Tax

ACCT-5344 Advanced Auditing: Professional Standards and Practices

ACCT-5345 Advanced Managerial Accounting

ACCT-5346 Advanced Financial and Nonprofit Accounting

The Minor in Business Administration Legal Studies 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.

- BAT 2302
- BAT 3302
- BAT 3303
- MATH 2308
- BAT 3305
- BAT 3306

D. Minor in Global Supply Management

The Minor in Global Supply Chain Management addresses students who would like achieve a basic yet rigorous understanding of the fundamentals of supply chain management in a global setting, including topics such as operations, procurement, lean systems, sourcing, warehousing, supply chain analytics and international logistics and distribution. The minor typically requires 20 credit hours in the School of Business and the successful completion of a primary major.

Requirements:

Students must take:

- BAT 1101
- BAT 1102
- One of BAT 2301 or MATH 1320
- BAT 2302
- BAT 3301
- One of BAT 3304 or BAT 3394
- BAT 3307
- An additional 3 credit hours from one of the following, in all cases selected in agreement with and pre-authorized by the Dept. Chair:
 - An appropriate upper level elective in the School of Business
 - BAT 3390, an independent study course, with a topic related to supply chain management
 - BAT 3_97, an internship course, with a topic related to supply chain management

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-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. (Also listed as BAT 3303) (Offered every other Fall.) Prerequisite: BAT 1101, BAT 2301, BAT 2302 and MATH 2308.

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-3344 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. Prerequisite: ACCT 3341

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 yu at 6 o cenco nfor u-3- u-3- u u-3-

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 three-credit hour internship requires employer documentation of the internship objectives and nature of work assignments, submission of employer intern evaluations, bi-weekly intern journals, and a summary memorandum from the intern at the conclusion of the internship period. Course must be taken Pass/Fail. Prerequisite: senior standing, concentration 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 1359.) PHIL 1354

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 ples0 e



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



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

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production planning and scheduling, warehousing, and forward and reverse logistics and distribution, all in the context of global supply chains. (Offered Occasionally.) Prerequisite: BAT 3301

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

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

organizations. Topics must be strongly related to current challenges in business analytics, technology, operations, or information systems. (Offered every Spring.) Prerequisites: BAT 3305 Corequisite: BAT 4102

BAT-1111 Data Visualization Lab

This lab offers hands-on instruction in data visualization design and implementation using state of the art software solutions. This lab is open to students of all majors and may offer the opportunity to earn an external certification if so desired by the student.

Finance

FNCE-1300 Personal Finance

ECON 3356.) Prerequisites: ECON 1312

FNCE-3352 Investments I

Analysis of financial instruments including securities and bonds, as well as macro and industry sector analysis. (Offered every year.) Prerequisites: FNCE 3301.

FNCF-3353 Investments II

This course covers less common investment vehicles such as real estate, private equity, hedge funds, and venture capital. (Offered every year.) Prerequisite: FNCE 3301

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 Equity Valuation

The objective of this course is to develop the ability to value a company's equity by analyzing its financial statements and forecasting its financial performance. This class will look at differences in valuation approaches, the advantages and disadvantages of different approaches, and why different approaches are used depending on the situation. Financial principles and procedures are applied in the analysis of real world data. (Offered every year.) 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 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.)

FNCF-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 rise, and to value and utilize derivatives in a variety of contexts. Prerequisites: FNCE 3352 - Investments

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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 lettEes of goods and servicesyade Or ce organizations suth ys the (World Trad suth ys the (World Trad suth ys the Organizations).

INTB-3396 Internship in International Business
This is a supervised, internationally oriented internship. Students registered for this course will serve as interns,
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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). Prerequisite: 15 hours of Core Business Curriculum, Consent of internship coordinator and Business Administration department chair.

MGMT-4381 Performance and Compensation Management

This course is designed for students with a defined interest in Management. It covers advanced human resource management (HRM) topics such as designing and evaluating performance appraisal systems in modern organizations, job evaluation, pay level and pay structure design, legally required and voluntary benefits programs, and issues with compensating non-traditional work forces. (Offered every Fall.) Prerequisite: MGMT 3371

MGMT-4382 Employee and Labor Relations

An academic and hands-on study of managing employee and labor relations through negotiations, collective bargaining and alternative dispute resolution. (Offered every Spring.) Prerequisites: MGMT 3371

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 instructo
MKTG-3-92 Special Topics in Marketing

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.

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.

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

<u>Carolyn Becker, Ph.D.</u>, Professor, Psychology

<u>Jennifer Jacobs Henderson, Ph.D.</u>, Professor, Communication

<u>Rita Drieghe Kosnik, Ph.D.</u>, Professor, Business Administration

<u>John McGrath, Ph.D.</u>, Professor, Human Communication and Theatre

<u>Dominic G. Morais, Ph.D.</u>, Assistant Professor, Business Administration

<u>Jacob K. Tingle, Ed.D.</u>, 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 is 9 stua. Ph. o. oy

Community Service combines volunteerism with pre-experience education and post experience reflection. An

HCOM 1333	Public Speaking
HCOM 3360	Communicating in Small Groups and Teams
HCOM 3362/BUSN 3311	Organizational Communication
MKTG 3381	Consumer Behavior*
MKTG 3382	Integrated Marketing Communications

Business and Economics

BAT 3302	Data Science*
BAT 3303	Business Analytics*
BUSN 3314	Sustainability & Corporate Social Responsibility
ECON 3327	Sports Economics
ECON 3329/MGMT 3311	Labor Economics and Labor Relations*
FNCE 3301	Corporate Finance*
MGMT 3361	International Management*
MGMT 3371	Human Resource Management*

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

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-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 inmarket 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-3320 Strategic Management in the Sport Industry

Strategic Management in the Sport Industry is an advanced and comprehensive course. The primary objective is to introduce students to the analysis of strategic problems and challenges facing sport industry executives. The course will require students to formulate strategies and consider implementation issues. To achieve the course goals, students will learn design thinking, a process for creative problem solving. (Offered every Fall.) Prerequisites: One of the following: SPMT 3308, 3309, 3316, 3317, or 3319; and one of the following: BAT 3302, COMM 3357, COMM 3360, COMM 3361, ECON 3327, FNCE 3301, HCOM 3360, HCOM 3362, INTB 3330, MGMT 3372, MGMT 3383, MKTG 3382, or MKTG 3383

SPMT-3321 Tom Brown's School Days: Sport in England

The course explores the cultural, economic, political, and social forces which shape the British sport landscape. England represents an ideal location because it gave birth to a multitude of sports which are popular globally and because the notion of amateurism as a counterpoint to professionalism stems directly from the British class system. This class introduces students to the major historical themes in British sport, acquaints students with the British systems of organized sports organizations, and compares the American and British sport models. (Offered every other year.) Prerequisites: SPMT 1312 and consent of instructor

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

<u>Christine Drennon, Ph.D.</u>, Associate Professor, Sociology and Anthropology <u>Shana McDermott, Ph.D.</u>, Assistant Professor, Economics <u>Tahir H. Naqvi, Ph.d.</u>, Associate Professor, Sociology and Anthropology <u>Kathryn O'Rourke, Ph.D.</u>, Associate Professor, Art and Art History; Acting Director

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 major that focuses on the global phenomenon of urbanization as well as the history and nature of cities. The program incorporates a wide variety of disciplinary approaches to the study of urbanization, urban processes, urbanity, and urbanism. Students explore the city from multiple perspectives, which prepares them for graduate work in several disciplines and careers in fields concerned with urban life. Urban Studies majors have extensive interaction with the city in research, class projects, and internships. Students are encouraged to shape their course of study according to their interests in consultation with their advisor.

Requirements

The Major

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

I. Specific major degree requirements (34-39 credit hours total):

A. The Core Curriculum:	
URBS/SOCI 1310 The Urban Experience	

PLSI 3416/URBS 3336	Urban Government and Politics
SOCI 2314	Social Problems and Human Values
SOCI 3340	Urban Geography
URBS 3370	Applied Urban Studies
URBS 4-91	Special Topics in Urban Studies (as appropriate)

II. University requirements: completion of all other required elements of the Pathways curriculum and at least 120 credit hours.

The Minor

Students may complete a minor in Urban Studies by meeting the following requirements:

I. Completion of 18 credit hours of Urban Studies courses, including:

A. URBS/SOCI 1310 The Urban Experience

Urban Studies electives (15 credit hours) chosen from the course list above.

Additional Requirements:

At least 9 hours of the total must be in upper-division courses.

No more than 12 of the hours used to satisfy the minor requirements (including crosslisted courses) may come from any one department.

At least 9 hours of the total must come from URBS courses (including cross-listed courses).

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

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-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-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

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-3440 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 3440.) Prerequisite: At least 3 hours completed in Sociology

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 hose 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-3465 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 3465.) (Offered every year.) Prerequisite: SOCI 3359 or ANTH 3359

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 course 6BS-3-904to 65 the /cs v BS-3-904to BS-3-

Women's and Gender Studies

Faculty

Dania Abreu-Torres, Ph.D., Associate Professor, Modern Languages and Literatures Rosana Blanco-Cano, Ph.D., Associate Professor, Modern Languages and Literatures Jenny Browne, M.F.A., Associate Professor, English

Anene Ejikeme, Ph.D., Associate Professor, History

Sarah E. Erickson, Ph.D., Assistant Professor, Communication; Co-Director Sajida Jalalzai, Ph.D., Assistant Professor, Religion

Debra Ochoa, Ph.D., Associate Professor, Modern Languages and Literatures

Willis Salomon, Ph.D., Associate Professor, English

Amy L. Stone, Ph.D., Professor, Sociology and Anthropology; Co-Director Gina Tam, Ph.D., Associate Professor, History

Angela Tarango, Ph.D., Associate Professor, Religion

Overview

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 <u>Supporting Courses</u>.
- 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-1 -1

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
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)
WAGS 3401	The History of Sexuality: Sex and Gender in Modernity

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

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 topic 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.