TRINITY UNIVERSITY

COURSES OF STUDY

Undergraduate and Graduate Studies

Effective June 2009

FOR THE 141th ACADEMIC YEAR

ADDITIONAL INFORMATION

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The statements set forth in this bulletin are for informational purposes only and do not create a contract between a student and Trinity University. The University reserves the right to change provisions listed in this catalogue in event of emergency circumstances without notice to individual students. Trinity University reserves the right to change, cancel, or add to the courses or faculty assignments listed in this bulletin at any time without prior notice.

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STATEMENT OF INSTITUTIONAL MISSION

(Approved by the Trinity University Board of Trustees on January 20, 2006)

Trinity University is an independent co-educational university whose mission is excellence in the interrelated areas of teaching, research, and service. Trinity seeks to provide broad and intensive educational opportunities primarily to undergraduates in liberal arts and sciences, and in selected professional and pre-professional fields. It also offers a small number of selected high quality graduate programs.

Trinity University is dedicated to creating a superior intellectual environment by: recruiting, developing and retaining outstanding faculty members dedicated to teaching, to scholarship and creative endeavor, and to service to the University and its community; identifying, and attracting talented and highly motivated students to its predominantly full-time, residential student body; and providing a supportive and challenging experience wherein students, faculty, and staff can realize the potential of their abilities and engage their responsibilities to others. Trinity respects its historic ties to the Presbyterian Church, with which it continues to have a covenant relationship.

DIVERSITY FOR EXCELLENCE AT TRINITY - A STATEMENT OF INTENT

(Adopted by the Board of Trustees, May 1985)

Trinity University stands committed to the attainment of excellence in liberal arts education. It affirms that, in our pluralistic society and world, excellent education must be carried out in a pluralistic setting. To the extent that education is carried out in a monocultural context, the quality of educational transactions suffers, and any claim to excellence is seriously weakened. Socializing young people to be liberally educated citizens of a democracy must take place in a context where the diversity of the experience, points of view, interests, and contributions of their fellow citizens is fairly and unavoidably encountered.

As it moves toward recognition as a nationally distinguished educational institution, Trinity University recognizes that such status demands the achievement and maintenance of ethnic diversity within all of its constituent groups, thereby reducing the prospect that the University may be unfairly stereotyped. Trinity University is also a member of a community that is massively Hispanic in character and identity. This not only opens unique educational opportunities for all who teach and study at Trinity, but also places a special obligation on the University to be responsive to and to enrich the life of its larger community. Because of its national aspirations and location in San Antonio, Trinity University has a special responsibility to assure that minorities - Blacks and Hispanics in particular - become an integral and significant part of its constituencies.

Trinity University, therefore, affirms that promotion of diversity and avoidance of racial, sex, class, and ethnic exclusivity are moral imperatives. It affirms that the University's highest goal must be to educate men and women for moral sensitivity and responsible action in society. To achieve diversity for excellence, Trinity University will endeavor:

1. Actively to seek the enrollment and retention of significant numbers of qualified students of Hispanic, Black, Native American and Asian American origin.

2. Actively to promote the financial, academic, and social conditions which will make it possible for qualified students of all ethnic and social class backgrounds to be significant components of, and positive contributors to, the Trinity University community.

3. Actively to seek a larger component of minorities and women in the Trinity University Faculty and Administration.

4. Actively to promote Trinity's openness to social and ethnic diversity, using academic programs, lectureships, artistic endeavors and other means to create within the University community an awareness of the life, concerns, and contributions of all national minorities.

5. Actively to promote, by similar means, Trinity's appreciation of the special multicultural composition of San Antonio, and of the Hispanic culture of the region.

TRINITY UNIVERSITY: COMMITMENT TO EXCELLENCE

(Approved by the Trinity University Board of Trustees, May 4, 1990)

In its commitment to excellence Trinity University is not only concerned with intellectual development, but also with moral and spiritual growth. The integration of body, mind, and spirit to achieve a wholeness in human life is fundamental to the well-being of the individual and to the very nature of the University itself. Recognizing these truths the University strives to create an atmosphere in which civility and human decency are expected, mutual respect and open communication are fostered, and sound religious faith and expression are encouraged.

In response to these principles Trinity University affirms the following:

1. The essential moral code rooted in the Judeo-Christian heritage has been foundational to Western civilization and continues to inform and shape life on the University campus.

2. Members of the University community are responsible for their actions and how those actions impinge on those around them.

3. Wisdom, good judgment, and concern for others are to be held in higher regard than narrow, self-interest.

4. The basic rights and dignity of each individual are to be upheld in the climate of a just and humane environment.

5. Behavior that is psychologically or physically destructive either to the self or to others is unacceptable in the University setting.

6. An on-going and historic church-relationship that encourages religious and academic freedom is a positive force both in the continuing development of the University and in fostering a Christian presence and ethos on the campus.

7. The willingness to give of one's time, talents, and resources in service to the larger world is a primary end-product of quality education.

Trinity University and its Board of Trustees embrace commitment to excellence in the moral and spiritual realm as vital to the University's mission, its present

well-being, and its long-term good.

HISTORY

Three small antebellum Presbyterian schools in Texas, Ewing College (1848), Chapel Hill College (1849), and Larissa College (1855), were the antecedents of Trinity. When each became a casualty of the Civil War, Texas Presbyterians in 1866 began to make plans to establish a single institution of higher learning.

Trinity University opened its doors on September 23, 1869, in the town of Tehuacana. As early as 1888 the question of transferring the University to a larger, more advantageous location was discussed, but it was not until 1902 that Trinity moved to Waxahachie, where it remained for four decades. While there, Trinity became a member of the Southern Association of Colleges and Schools. During this period, graduates of the Fairemont Female Seminary at Weatherford were accepted as alumnae of Trinity when the Seminary was closed.

On February 25, 1942, the Synod of Texas voted to accept an invitation from the San Antonio Chamber of Commerce to relocate Trinity University to the Alamo City. In order to facilitate the move, the Southwest Texas Conference of the Methodist Church and the Board of Trustees of the University of San Antonio, assisted by the San Antonio Chamber of Commerce, transferred the property of the University of San Antonio without restriction to the Board of Trustees of Trinity University. All credits and degrees given by the University of San Antonio and its predecessors, San Antonio Female College and Westmoorland College, are acknowledged by Trinity University, which also recognizes as alumni the former students of these institutions.

In February 1945, an attractive new campus site of more than one hundred acres was obtained on the north side of San Antonio. Construction began in 1949, and on May 13, 1952, the University officially moved into its new Skyline Campus overlooking the city.

ACADEMIC REGULATIONS
UNDERGRADUATE STUDIES

SEMESTER HOURS

A semester hour, in its usual application, is one 50-minute period of recitation or lecture, or three such periods of laboratory work, each week for a semester of 15 weeks. The usual semester's work in any one course gives three semester hours of credit. Each lecture or recitation hour presupposes an average of two hours of outside preparation on the part of the student.

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

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 semester 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 semester hours on record.
Junior	A minimum of 58 hours on record.
Sophomore	A minimum of 26 semester hours on record.
First year	Fulfillment of entrance requirements and less than 26 semester 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 semester hour of credit as follows:

A	superior	4.000
A-		3.667
B+		3.333
B	good	3.000
B-		2.667
C+		2.333
C	average	2.000
C-		1.667
D+	poor	1.333
D		1.000
F	failure	0.000

I..... incomplete
W..... withdrew from course
PP..... passing in a pass/fail course
FF..... failing in a pass/fail course
PR..... in progress (thesis course only)

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

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

GRADE POINT AVERAGE

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

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

GRADES IN MAJOR OR MINOR

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

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

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. Mid-semester grades of D and F are not permanently recorded but may be sent for information and guidance. The semester grades become a part of the student's permanent record.

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 Curriculum requirement may be taken Pass/Fail unless the course is offered exclusively on a Pass/Fail basis.
c. Pass/Fail courses must be listed at the time of registration and may not be changed after the date specified in the academic calendar (15 days from start of classes) to a letter grade basis; conversely, courses taken for a letter grade may not be changed subsequently to Pass/Fail after the 15th class day.

Not all departments permit Pass/Fail registration. Courses which may not be taken Pass/Fail are usually marked on the published class schedule.

INCOMPLETE GRADES

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

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

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

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

REPEATING OF COURSES

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

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 records of students	Vice President for Student Affairs
Teacher education records	Chair, Department of Education
Financial aid records	Director of Financial Aid
Financial records	Associate Vice President for Fiscal Affairs
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 STANDING

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

A. 1.80 cumulative GPA for first semester students who have attempted at least 12 semester hours.
B. 2.00 cumulative GPA for students beyond the first semester who have attempted more than 12 semester 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 and must also be enrolled for at least 12 hours during the semester in which competition takes place.

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 academic good standing will be measured only on grades earned at Trinity University.

SATISFACTORY PROGRESS REQUIREMENTS FOR UNDERGRADUATE FINANCIAL AID RECIPIENTS

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

PROBATION AND DISMISSAL

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

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

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

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

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

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

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

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

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

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

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

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

DISMISSAL FROM A CLASS AND STUDENT ATTENDANCE

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

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

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

POLICY REGARDING DISRUPTION OF CLASS

Students will not be permitted to behave in such a manner as to disrupt the orderly conduct of classroom activities. When such behavior occurs, it is the responsibility of the instructor to discuss the matter with the student involved, warning the student that continuation of such behavior may result in dismissal from the class. If the behavior continues, the faculty member may drop the student from the class. Notification of such action shall be communicated in writing to the student, the student’s faculty advisor, the department chair, and the Vice President for Academic Affairs. This notification must include a statement of the reasons for the decision and a summary of the appeal procedures. The student has a period of two school days in which to file a written appeal with the Vice President for Academic Affairs. A copy of the dismissal notification will remain in a file created for this purpose in the Office of Academic Affairs; the copy will be destroyed when the student is graduated. If the dismissal from class occurs before the published deadline for withdrawal from a class, the student will receive a grade of “W” in the class; if it occurs after the deadline, the grade will be “F.”

REPRESENTATION OF THE UNIVERSITY BY A STUDENT

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

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

ADDITIONAL INFORMATION

Address all inquiries to the appropriate person or department at:

Trinity University , One Trinity Place , San Antonio , TX 78212-7200

Admissions:
Undergraduates not having previously attended Trinity University:

Christopher Ellertson
Dean of Admissions and Financial Aid
(210) 999-7207; Fax: (210) 999-8164
admissions@trinity.edu

Undergraduates having previously attended Trinity University:

Alfred Rodriguez
Registrar
(210) 999-7201; Fax: (210) 999-7202
roffice@trinity.edu

Office of Academic Affairs:

(210) 999-8201; Fax: (210) 999-8234
cgarza@trinity.edu

Graduate students not currently enrolled at Trinity University:

Business Administration
(Accounting)
(210) 999-7238; Fax: (210) 999-8134
psandlin@trinity.edu

Education:

(210) 999-7501; Fax: (210) 999-7592
smireles@trinity.edu

Health Care Administration:
(210) 999-8107; Fax: (210) 999-8108
hca@trinity.edu

Registration:

Alfred Rodriguez, Registrar
(210) 999-7201; Fax: (210) 999-7202
roffice@trinity.edu

Student Affairs and Dean of Students:

Dr. Felicia J. Lee
Vice President for Student Affairs
(210) 999-8521; Fax: (210) 999-7857
student.affairs@trinity.edu

David Tuttle, Dean of Students and
Director of Residential Life
(210) 999-8521; Fax: (210) 999-8529
dtuttle@trinity.edu

Residential Life:

Wanda Olson
Assistant Director of Residential Life
(210) 999-7219; Fax: (210) 999-7251
reslife@trinity.edu

Campus & Community Involvement:

Becky Spurlock
Director
(210) 999-7547; Fax: (210) 999-7254
becky.spurlock@trinity.edu

Career Services:

Dr. Brian Hirsch
Director
(210) 999-8321; Fax: (210) 999-7493
brian.hirsch@trinity.edu

Counseling and Health Services:

Dr. Gary W. Neal, Director
(210) 999-7411; Fax: (210) 999-7848
gneal@trinity.edu

Financial Aid:

Sean Smith
Dean of Financial Aid
(210) 999-8315; Fax (210) 999-8316
financialaid@trinity.edu

Fiscal Affairs:

Ana Windham
Associate Vice President for Fiscal Affairs
(210) 999-7301; Fax: (210) 999-7062

cmundy@trinity.edu

The statements set forth in this bulletin are for informational purposes only and do not create a contract between a student and Trinity University . The University reserves the right to change provisions listed in this catalogue in event of emergency circumstances without notice to individual students. Trinity University reserves the right to change, cancel, or add to the courses or faculty assignments listed in this bulletin at any time without prior notice.

COURSE ABBREVIATIONS

AFAM	African American Studies	LING	Linguistics
ART	Art	MATH	Mathematics
ARTH	Art History	MDRS	Medieval and Renaissance Studies
BIOL	Biology		
			Modern Languages and Literatures:
	Business Administration:	ARAB	Arabic
ACCT	Accounting	CHIN	Chinese
BUSN	Business	FREN	French
FNCE	Finance	GERM	German
MGMT	Management	ITAL	Italian
MIS	Management Information Systems	ML&L	Modern Literature
MKTG	Marketing	RUSS	Russian
		SPAN	Spanish
CHEM	Chemistry		
			Music:
	Classical Studies:	MUSC	Music
CLAS	Classics	MUSE	Music Ensemble
GREK	Greek	MUSI	Music Instruction
LATN	Latin		
		NEUR	Neuroscience
COMM	Communication	PHIL	Philosophy
CMLT	Comparative Literature	PHED	Physical Education
CSCI	Computer Science	PHYS	Physics
ECON	Economics	PLSI	Political Science
EDUC	Education	PSYC	Psychology
ENGR	Engineering Science	RELI	Religion
ENGL	English	SCOM	Scientific Computing
ENTR	Entrepreneurship		
ENVI	Environmental Studies		**Sociology and Anthropology:**
FILM	Film Studies	ANTH	Anthropology
GNED	General Education	SOCI	Sociology
GEOS	Geosciences		
			Speech and Drama:
	Health Care Administration:	SPCH	Speech
HCAD	Health Care Administration	DRAM	Drama
HCAI	Executive Program		
		SPCL	Special Studies – U.S. and Abroad
HIST	History	URBS	Urban Studies
HUMA	Humanities	WAGS	Women's and Gender Studies
INTL	International Studies		

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

STUDENT EXPENSES

UNDERGRADUATE AND GRADUATE STUDIES

Trinity University is a privately supported institution. The educational and operating expenses are provided by payments from students; income from endowment funds; appropriations and gifts from churches, trustees, alumni, foundations, businesses, industries, and generous-spirited individuals.

Tuition and fees cover less than half the actual cost per student. The difference is paid from the sources indicated above. Thus, each full-time student attending Trinity University receives, in effect, an annual subsidy in addition to any other scholarship or student aid granted to individual students.

UNDERGRADUATE STUDENT EXPENSES FOR 2009-10

FOR ALL FULL-TIME UNDERGRADUATE STUDENTS	**Each Semester**	**Total For Year**
*Tuition (12 to 18 semester hours), Fall 2009, Spring 2010 (Summer, 2009 - $1,111.00 per semester hour)	$14,136.00	$ 28,272.00
Activity Fee (Full-time students - 12 or more hours)	$ 90.00	$ 180.00
Total	$ 14,226.00	$ 28,452.00
Activity Fee (Part-time students)	$ 7.50/hour	
Activity Fee (Summer School students)	$ 1.00/hour	
FOR BOARDING STUDENTS		
**Board (subject to state and city sales tax)	$ 1,535.00	$ 3,070.00
***Room-Basic Charge (two to a room)	$ 2,940.00	$ 5,880.00

* Trinity charges a flat tuition rate for students taking a full-time class load of 12 to 18 semester hours. At the present full-time tuition rate, the student who enrolls for 12 semester hours is paying $1,178.00 per semester hour; one who enrolls for 16 semester hours is paying $883.50 per semester hour; and one who enrolls for 18 semester hours is paying $785.33 per semester hour. Undergraduate students taking more than 18 hours in a semester may do so only with special permission. Additional charges of $1,178.00 per hour will be incurred for hours exceeding the 18 hour limit, unless the additional charges are solely a result of a Music Ensemble or Peer Tutor class; in which case the nineteenth hour will not be charged. Summer 2009 tuition enrollment cost will be $1,111.00 per semester hour.

**Light Meal Plan. See section on optional fees for cost of other meal plans.
***Rates may vary depending on room location and may include other fees. See optional fees for other room rates.

With instructor approval and available classroom space, a student may audit a course at the same tuition rate as a course for credit.

The University reserves the right to adjust for board and room charges at the beginning of any semester. Students should understand that tuition and fees may not remain the same throughout four years of attendance at the University.

DEPOSITS

DEPOSIT FOR RETURNING STUDENTS

For returning resident students, a $300.00 room deposit is required in mid to late March to reserve a residence hall room for the following academic year. This deposit is nonrefundable. You may pay this deposit via E-Pay at https://payonline.trinity.edu/tsa/web/login.jsp.

ADVANCE DEPOSITS FOR NEW STUDENTS

For new resident students, a deposit of $500.00 is required by May 1 or within 30 days of acceptance, if acceptance is after March 31. This deposit will be applied as follows: $100.00 for the room, $200.00 for tuition, $100.00 for room damage deposit, and $100.00 as a nonrefundable enrollment fee.

The damage deposit balance is credited to a student's account (or refunded to graduates or those withdrawing) upon a student's final termination of campus residence.

For new commuting students, a tuition deposit of $200.00 and a $100.00 nonrefundable enrollment fee are required by May 1 or within 30 days of acceptance, if acceptance is after March 31.

These deposits are not covered by financial aid packages and should not be included in time payment contracts. These deposits are not refundable.

FEES AND PENALTIES FOR SPECIAL PURPOSES

Students pay the following specific fees and penalties when assessed:

FEES:

Advanced standing examination, per semester hour..... $15.00
Application, paid at first application for admission only (nonrefundable)..... $50.00
Application, if filed electronically ..... No charge
Degree Requirements in Progress registration (SPCL 4099)..... $200.00
Lost I.D. card (nonrefundable)..... $25.00
Lost Residence Hall Room Key or failure to return keys..... $40.00
Study Abroad (SPCL 3091, 3092, 3094, 3095)..... $75.00
Transcript..... No charge

*COURSE RELATED FEES:***

Anthropology Fee..... $8.00
Applied Music Fee..... $400.00 per semester
Art Fee..... $75.00
CHEM 1118, 2119, 2220, 3221..... $20.00
Communication Field Trip..... $35.00
Geosciences fees
GEOS 1304, 1305, 3402..... $25.00
GEOS 2304, 2401..... $30.00
GEOS 1307, 3407..... $35.00
GEOS 3120..... $75.00
GEOS 3300, 3400, 3401, 3405,..... $50.00
GEOS 3422..... $40.00
GEOS 3411, 3412..... $50.00
Physical Education fees
Trap and Skeet..... $125.00
Golf..... $50.00

Required Fees

	Each Semester	For Year
Technology Communication fee (on campus)	$405.00	$810.00
Network fee (off campus)	$87.50	$175.00
Tiger card fee (off campus)	$25.00	$50.00

Optional Fees

Vehicle registration fee	$37.00	$70.00
Additional Board Plan Upgrades:		
Average Eater Plan (subject to sales tax)	$1,700.00	$3,400.00
Hearty Eater Plan (subject to sales tax)	$1,967.50	$3,935.00
Specially Located or Larger Rooms Rates:		
McLean Residence Hall (limited to 16 spaces)	$3,107.50	$6,215.00
Lightner Residence Hall (limited to 120 spaces)	$3,107.50	$6,215.00
Thomas Residence Hall (limited to 44 spaces)	$3,107.50	$6,215.00

PENALTIES:

Late Fee***..... $100.00
Returned Check, each item..... $25.00

**All course-related fees are nonrefundable after the specified add/drop period. New fees may be charged and/or existing fees may be changed without notice.
***Late fee is assessed to students who are disenrolled for nonpayment and are re-enrolled, who fail to make payment of obligations when due, or who register after the normal registration period deadlines.

TUITION AND FEES FOR PART-TIME STUDENTS

A student enrolled for fewer than 12 semester hours of academic credit is classified as a part-time student and pays tuition and fees as follows:

Tuition per semester hour for students registered for 1 to 11 hours..... $1,178.00
Activity fee per semester hour..... $7.50

GRADUATE STUDENT EXPENSES FOR 2009-10

Application Fee (nonrefundable, to accompany application for admission)..... $30.00

Tuition

For Fall and Spring Semesters
All graduate students enrolling for 1 to 11 semester hours, each semester..... $1,178.00 per semester hour
All graduate students enrolling for 12 to 18 hours, each semester ..... $14,136.00 per semester
For Summer Session, 2009..... $1,111.00 per semester hour

Fees

Graduate Student Activities Fee, for Fall and Spring Semesters..... $1.00 per semester hour up to $9.00

Teleconferencing Fees
HCAI 5220, 5221, 5231, and 5270..... $30.00
All other fees..... $60.00

Fees for Special Purposes:

Thesis 6098 Fee..... $10.00
6099 Degree Requirements in Progress Fee..... $200.00
Thesis Binding, Handling, and Mailing Fee Per Copy..... $10.00
Late Fee..... $100.00
(Assessed to student who is disenrolled for nonpayment and re-enrolled, who fails to make payment of obligations when due, or who registers after the normal registration period.)
Penalty for returned check, each item..... $25.00
Degree Requirements in Progress registration (SPCL 6099)..... $200.00

ADVANCE DEPOSIT

Applicants who receive notice of acceptance are required to make an advance deposit of $200 (nonrefundable). This deposit is applied toward tuition. You may pay this deposit via E-Pay at https://payonline.trinity.edu/tsa/web/login.jsp.

GRADUATE ASSISTANTSHIPS AND SCHOLARSHIPS

Graduate assistantships and scholarships are made available through the Maria Agnes Walton Memorial Graduate Scholarship Fund and other restricted graduate scholarship funds. Some departments also have a limited amount of scholarship aid available through support from foundations and federal grants. For further information on graduate assistantships, contact the appropriate academic department.

STATEMENT OF POLICY REGARDING TUITION AND STUDENT FEES

A student who applies and is admitted to Trinity University assumes a definite financial obligation. It is expected that the student or his/her parents or guardian will comply with provisions of this section of the bulletin relative to payments of accounts and bills. All checks should be made payable to Trinity University unless otherwise directed.

A student who is regularly enrolled and has made payments in full or executed a University approved contract with an educational payment plan is entitled to all the privileges of attending classes, taking examinations, receiving grade reports, securing course credit, graduating, and residence hall access, and cafeteria meals where applicable.

Any student who is delinquent with a financial obligation to the University, including and not limited to damage to University property, traffic fines, health services charges, or library fines, is subject to exclusion from any or all of the usual privileges of the University. Graduation may be denied, and his/her permanent record will not be released until the outstanding balance is paid in full.

Delinquent account balances, which include student loans, will be turned over to a collection agency. Any fees associated with the collection of the debt are the responsibility of the student.

STATEMENT OF POLICIES REGARDING STUDENT EXPENSES

1. EACH STUDENT IS LEGALLY RESPONSIBLE FOR HIS OR HER SCHOOL EXPENSES. It is imperative that students and parents (when applicable) be aware of the cost of tuition, required fees, and room and board expense for the contract period, defined as the semester for which the student is enrolling.

2. STUDENT ENROLLMENT IS COMPLETED ONLY WHEN TUITION AND EXPENSES ARE PAID IN FULL or upon making satisfactory arrangements for a contract with educational lending organizations approved by Trinity University. Through these organizations, many students or parents have found it convenient to pay school costs in monthly installments.

3. The form entitled STUDENT CONSENT TO RELEASE EDUCATIONAL RECORDS, which may be found online at www.trinity.edu/departments/buso under GENERAL INFORMATION, gives authorization to release financial information to parents or other responsible parties. If your student has not provided us with this information, you may print the form, have the student fill it out, sign it, and return the completed form to the Office of Student Accounts immediately.

The alternative payment plan endorsed by Trinity University is available through Sallie Mae Tuition Pay. This interest-free plan enables you to make monthly payments in increments of 4 to 12 months. Participation in this plan requires an annual enrollment fee of $55, and if paid after July 11th, $100 (subject to change). Further information is readily available at the Office of Student Accounts at (210) 999-7391/7396 or student.accounts@trinity.edu.

Tuition and expense bills are posted online in early to mid-July for the fall semester, and early December for the spring semester. These bills contain tuition and related fees and reflect financial aid awarded. The awarded aid may not equate to finalized financial aid; it is the student's responsibility to finalize all the paperwork. Students and parents/guardians are responsible for the balance owed after all credits are applied.

The balances are payable as follows: Summer 2009 Semester – May 26, 2009; Fall 2009 Semester – August 14, 2009; Spring 2010 Semester – January 7, 2010. Interim monthly bills are mailed throughout each semester for incidental fees incurred.

The Trinity University Student Accounts Office now offers E-Bill/E-Pay, E-Refunds, and E-Deposits. All bills, both semester and monthly, are available online at https://payonline.trinity.edu/ tsa/web/login.jsp.

We urge students to authorize users (other than themselves) via this website so other parties that may be responsible for payment can view the bills online. Payment online is highly encouraged. Due to the E-Bill/E-Pay system, all viewing/receiving of the bill will occur online. Automated e-mails will be sent to your Trinity e-mail address each time your E-Bill is posted online. You may add an alternative e-mail address (see the links under E-Bill/E-Pay), select My Profile, then Personal Profile on the menu bar. E-Billing and E-Pay are available 24/7 and offer a convenient and secure method of receiving bills and sending payments.

The University does not accept credit card payments or stock transfers for tuition and fees by phone or at the cashier window. However, subject to a convenience fee of approximately 2.75%, payments may be made online at https://payonline.trinity.edu/tsa/web/login.jsp. MasterCard, American Express, and Discover are accepted. E-check payment is free. Contact the Office of Student Accounts for further instructions on how to use this service.

To receive credit balance refunds more quickly, you can set up your E-Refund profile online at https://payonline.trinity.edu/tsa/web/login.jsp. Log in and then click on the refund tab at the top of the web page to initiate the process.

E-Refunds may take up to 3 business days but are much quicker than check refunds. We encourage you to complete your E-Refund profile.

SCHEDULE OF REDUCED COSTS UPON APPROVED WITHDRAWAL OR FOR COURSES DROPPED

A student who desires to withdraw from the University with official approval will apply for complete withdrawal through the Office of the Registrar.

A student who desires to drop a course must do so online in TigerPaws or in the Office of the Registrar.

Failure to attend class or simply notifying the individual instructor will not be regarded as an official withdrawal.

You may go to the website address: www.trinity.edu/departments/registrar. Here you will find the student resources downloadable forms. Choose the official application for a *withdrawal* or *leave of absence*. Once completed with all necessary signatures, this application should be sent to the Office of the Registrar.

Upon approval by the Office of the Registrar, the student will deliver the application to the Student Accounts area of the Business Office for computation of any balance to be paid or any refund due. On-campus students must check out of their dorm room within 24 hours and contact the Residential Life Office.

Withdrawals from the University due to serious accident, illness, mental disorder, nervous disorder, or death are not exempt from the following refund schedules. The Tuition Refund Plan, an inexpensive, elective insurance plan, provides protection from loss resulting from approved withdrawal from the University as the result of serious accident, illness, or death. PLEASE NOTE THAT BECAUSE THE UNIVERSITY IS OFFERING THIS INSURANCE PLAN, NO EXCEPTIONS WILL BE MADE TO THE UNIVERSITY REFUND POLICY.

Reductions in charges for withdrawal or for courses dropped in the fall or spring semester will be based on the following schedules:

ROOM..... no refund
BOARD..... 35% of unspent balance
STUDENT ACTIVITY FEES..... 100% refundable through the end of add/drop
..... and nonrefundable after add/drop
OTHER FEES (Refer to section on Fees and Penalties) ..... varies

TUITION for Fall 2009 and/or Spring 2010
100% through the last day of add/drop
50% beginning the day after add/drop and for the next eight days
0% beginning on the 9th day after add/drop

TUITION for Summer 2009
100% through the last day of add/drop
50% beginning the day after add/drop and for the next eight days
0% beginning on the 9th day after add/drop

For students who withdraw from the University and who have received financial aid, the University must determine the amount of financial aid that must be repaid to the federal, state, external, and institutional aid programs. Contact the Office of Financial Aid for specific details about financial aid refund and repayment policies.

TUITION INSURANCE

Trinity University offers the Tuition Refund Plan (T.R.P.) to supplement the University's published refund policy. This elective insurance plan provides coverage for tuition, room, board, and activity fee charges, less amounts covered by financial aid, that are not refundable under the University's published refund policy. Please note that all financial aid including institutional aid may be adjusted accordingly. Under no circumstances will the student be refunded an amount greater than out-of-pocket expense that may include loans. The insurance covers approved student withdrawals from the University as a result of serious illness, mental disorder, nervous disorder, accident, or death. The chart below illustrates how the T.R.P. complements Trinity's published refund schedule for tuition charges:

If the Withdrawal Occurs	Trinity Refunds	The T.R.P. Refunds	Student Receives
Through the last day of add/drop	100%	0%	100%
Beginning the day after add/drop and for the next eight days	50%	50%	100%
Beginning on the 9th day after add/drop	0%	100%	100%

NOTE: T.R.P. covers 60% of costs incurred for approved withdrawals due to emotional, nervous, or mental illness verified by a mental health professional provided one is confined in a hospital for seven consecutive days during the term.

The T.R.P. annual premium is approximately $130.00.

Please contact Student Accounts at (210) 999-7391/7396 or student.accounts@trinity.edu. For more information, you may go online at http://www.trinity.edu/departments/buso.

STUDENT OWNERSHIP AND/OR OPERATION OF AUTOMOBILES

Student ownership and/or operation of automobiles on or adjacent to the Trinity campus are subject to the Trinity University Parking and Traffic Regulations. Each automobile operated by a student must be registered and identified with a University vehicle registration sticker. Please refer to the 2009-10 Trinity University Parking and Traffic regulations for more information or go online at www.trinity.edu/departments/safe.htm.

VETERANS' BENEFITS

Trinity University is approved by the Texas Workforce Commission to provide training to eligible veterans under applicable public laws relating to veterans' educational benefits.

Trinity University will comply with the requirements of the Department of Veterans Affairs in certifying enrollment and academic progress of students receiving veterans' educational benefits. Students receiving veterans' benefits should be aware of the requirements for receiving those benefits. Trinity University will notify the Department of Veterans Affairs when a student although still enrolled is not eligible to continue receiving veterans' educational benefits because of not meeting satisfactory academic progress standards, such as when the student is continued for a second or subsequent semester on scholastic probation.

Eligible veterans are advised to contact the Registrar's Office at Trinity University for information and assistance in completing required forms for submission to the Department of Veterans Affairs. Veterans enrolled under the current Public Law provisions are subject to the same conditions concerning payment of accounts as those applicable to any other student.

Students receiving Veterans Affairs educational benefits must report those benefits to the Office of Financial Aid.

ENDOWED PROFESSORSHIPS

GEORGE W. BRACKENRIDGE DISTINGUISHED PROFESSOR OF BIOLOGY

ALICE PRATT BROWN DISTINGUISHED PROFESSOR OF ART HISTORY

GEORGE R. BROWN DISTINGUISHED PROFESSOR OF BUSINESS ADMINISTRATION

RICHARD M. BURR AND DONALD N. CLARK PROFESSORSHIP IN BUSINESS ADMINISTRATION (EAST)

CARUTH DISTINGUISHED PROFESSOR OF COMPUTER SCIENCE

RUTH CHAPMAN COWLES DISTINGUISHED PROFESSOR OF LIFE SCIENCES

UNA CHAPMAN COX DISTINGUISHED PROFESSOR OF INTERNATIONAL AFFAIRS

EWING HALSELL DISTINGUISHED PROFESSOR OF AMERICAN HISTORY

IMOGENE AND HAROLD D. HERNDON DISTINGUISHED PROFESSOR OF GEOLOGY

JESSE H. JONES DISTINGUISHED PROFESSOR OF BUSINESS ADMINISTRATION

JENNIE FARRIS RAILEY KING PROFESSOR OF RELIGION

J.K. AND INGRID LEE ENDOWED PROFESSORHIP IN CHINESE LANGUAGE AND LITERATURE

O.R. AND EVA MITCHELL DISTINGUISHED PROFESSOR OF LITERATURE

NORINE R. MURCHISON DISTINGUISHED PROFESSOR OF EDUCATION

T. FRANK MURCHISON DISTINGUISHED PROFESSOR OF THE HUMANITIES

NORINE R. AND T. FRANK MURCHISON DISTINGUISHED PROFESSOR OF THE HUMANITIES

DICK AND PEGGY PRASSEL DISTINGUISHED PROFESSOR OF BUSINESS ADMINISTRATION

GERTRUDE AND WALTER PYRON DISTINGUISHED PROFESSOR OF GEOLOGY

LILLIAN RADFORD DISTINGUISHED PROFESSOR OF EDUCATION

DR. D. R. SEMMES DISTINGUISHED PROFESSOR OF CHEMISTRY

E. M. STEVENS DISTINGUISHED PROFESSOR OF ECONOMICS

VERNON F. TAYLOR DISTINGUISHED PROFESSOR OF ECONOMICS

CHARLES A. ZILKER DISTINGUISHED PROFESSORSHIP OF PHYSICS

ENDOWED FACULTY FELLOWSHIPS

H. G. BARNARD FACULTY FELLOWSHIP (NO DEPARTMENTAL RESTRICTION)

JOHN M. BENNETT, SR. FACULTY FELLOWSHIP IN MATHEMATICS

MARIA AND ARTHUR BERGER FACULTY FELLOWSHIP IN ART HISTORY

COL. T. C. FROST FACULTY FELLOWSHIP IN BUSINESS ADMINISTRATION

ELIZABETH KOKERNOT HARDIE FACULTY FELLOWSHIP (NO DEPARTMENTAL RESTRICTION)

MARCIA AND OTTO KOEHLER FACULTY FELLOWSHIP IN BUSINESS ADMINISTRATION

ROBERT M. LUBY INTERFIRST BANKS FACULTY FELLOWSHIP IN BUSINESS ADMINISTRATION OR ECONOMICS

R. M. MCFARLIN FACULTY FELLOWSHIP (NO DEPARTMENTAL RESTRICTION)

GRETCHEN C. NORTHRUP FACULTY FELLOWSHIP (NO DEPARTMENTAL RESTRICTION)

JOHN ROGERS FACULTY FELLOWSHIP (NO DEPARTMENTAL RESTRICTION)

MR. AND MRS. PATRICK H. SWEARINGEN FACULTY FELLOWSHIP (NO DEPARTMENTAL RESTRICTION)

TRINITY UNIVERSITY FACULTY FELLOWSHIP IN RELIGION

TOM AND MARY TURNER FACULTY FELLOWSHIP (NO DEPARTMENTAL RESTRICTION)

R. R. WITT FACULTY FELLOWSHIP IN ECONOMICS

WILLIAM LISTON ZANDER FACULTY FELLOWSHIP IN ENGINEERING SCIENCE

DEGREE REQUIREMENTS
UNDERGRADUATE STUDIES

THE TRINITY CURRICULUM

Trinity University offers undergraduate programs leading to the Bachelor of Arts, Bachelor of Science, and Bachelor of Music degrees, with majors in 26 departments and programs. Students are thus offered a wide variety of options, broadened further by the great number of individual choices open to them in fulfilling the requirements of their chosen degree programs. At the same time, the University is fundamentally committed to ensuring that all Trinity undergraduate degrees represent the broad and solid base of general learning with an underlying commitment to responsible participation in human affairs, which is called a liberal education.

The Trinity Curriculum has three components. The first is called the Common Curriculum because it provides the foundation in the liberal arts and sciences of all the bachelor's degrees awarded by the University. Through it, all students are introduced to the common life of learning, reflection, and discussion in which they are expected to share during their University years.

A second component of the Trinity Curriculum is the major. This component 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 and/or construct a second, interdisciplinary major in consultation with their major advisors.

The third component of the Trinity Curriculum, the elective courses, enables the student to pursue other personal interests, to explore new areas of learning, or to pursue a minor or a second major.

To receive an undergraduate degree a student must:

Complete at least 124 semester hours (129 semester hours for a Bachelor of Science in Engineering Science; 132 for a Bachelor of Music, Major in Choral or Instrumental Music, or 141 semester hours for a Bachelor of Music, Major in Performance or Composition). At least 60 hours must be taken outside the major.

Complete the Common Curriculum.

Complete at least one major.

Complete 30 upper-division hours.

Earn a minimum grade point average of 2.0 in both the major and the entire program of study.

Satisfy the residency requirement. (See "Residency Requirement" in this section.)

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

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

Information Literacy at Trinity University

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

Student Responsibility

This Bulletin is designed to assist the student and academic advisor 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.

THE COMMON CURRICULUM

The Purpose of the Curriculum

The Common Curriculum reflects Trinity's commitment to the liberal arts and sciences. The Curriculum is meant to establish for each Trinity student a basis for understanding the varied domains of human knowledge and experience. The Curriculum also includes skills necessary for active, critical, and creative participation in the academic life of the University. Paramount among those skills are the abilities to think creatively and critically, and to express such thinking effectively both orally and in writing. Together, those understandings and skills are necessary for the personal, lifelong quest for understanding of oneself and one's place in the world, and the serious commitment to respond to the opportunities and needs of society and self, which are true marks of a liberally educated person. The Common Curriculum consists of the following:

I. The First-Year Seminar and Writing Workshop

A. The First-Year Seminar (FYS)

Every new student must enroll in a First-Year Seminar (GNED 1300 or GNED 1301) in the first year at Trinity. Major primary works in any of the fields traditionally included in the liberal arts and sciences are assigned for study and discussion in the seminars, which serve both to induct the

students into an intellectual discussion of substantive issues, and to enhance their speaking, writing, and bibliographic skills. A new transfer student with 26 semester hours of transfer credit or whose high school graduation date is a year or more prior to his or her matriculation at Trinity is exempted from the First-Year Seminar requirements. The total number of hours required for any Trinity degree shall not be reduced by an exemption from the First-Year Seminar.

B. The Writing Workshop

The Writing Workshop addresses itself to the refinement and enhancement of skills in critical reading, analysis, judgment, and written composition, making sure that students are proficient in the use of these essential tools early in their academic careers.

With few exceptions, first-year students will enroll, during their first year at Trinity, in a section of the Writing Workshop. The exceptions are: (1) students who have a score of 5 on the Advanced Placement Test in English Language and Composition, or the Advanced Placement Test in English Literature and Composition; or (2) students who transfer an equivalent course from another institution.

C. Four Options for Fulfilling these Requirements

1. First-Year Seminar and Writing Workshop in consecutive semesters with separate topics/foci.
2. Conjoined sections of First-Year Seminar and Writing Workshop under a single topic with multiple sections, each section earning six hours of academic credit (for example, HUMA 1600).
3. First-Year Seminar under a single topic with multiple sections and a consecutive, non-aligned section of Writing Workshop (for example, the First-Year Seminar in Science and Religion in the fall/Writing Workshop in the spring).
4. Individual sections of First-Year Seminar conjoined with individual sections of Writing Workshop in a given semester – fall or spring.

II. Foreign Language, Computer, and Mathematical Skills

Given the importance of skill in the use of foreign languages, of proficiency in the use of computers, and of an understanding of mathematical reasoning for contemporary liberally educated graduates, the Common Curriculum sets these standards. Students are encouraged to go beyond the minimum in all these areas.

A. Foreign Languages

Study of a foreign language is an essential part of a liberal arts education. Students are encouraged to continue their study of a foreign language and to study new languages. The University requires two years of a foreign language (either ancient or modern) for admission. To graduate from Trinity, students must reach a minimum level of competence corresponding to that attained after successful completion of the first semester of the second year of college foreign language study (courses number “2301”). Students can fulfill this graduation requirement by:

- Successfully completing a third-semester (intermediate) language course or higher at Trinity University, or receiving transfer credit for such a course
- Successfully completing an approved intermediate language course while studying abroad for at least one semester in a non-English speaking country
- Receiving an acceptable score on the Advanced Placement (AP) Test, the International Baccalaureate (IB) Exam, or the SAT II Language Exam
- Taking the third year of a single language in high school and receiving a B or better in the final semester of the last year
- Passing a language placement exam offered by the Department of Modern Languages and Literatures or the Department of Classical Studies

B. Computer Skills

Students must be able to use computers to collect, organize, analyze and communicate information in an academic environment. We expect that all students add to their computing skills at Trinity. During orientation their first year, students will take an examination to determine if they have competency in the following skills: (1) Introduction to Computing (hardware, software, files and formats); (2) Computers and Text (the uses of word processing software); (3) Computers and Numbers (quantitative analysis using spreadsheet software); (4) Computers and Information Retrieval (structuring and retrieving data using database software); (5) Computers and Graphics (visualizing and illustrating ideas using graphics software); (6) Computer Communications (using Local Area Networks, electronic mail and the Internet; and (7) Computer Ethics (issues of privacy and the legal use of software and data). Students who do not pass the test must fulfill this requirement by the end of the first semester of the sophomore year by completing an approved course built around these criteria which includes both instruction in, and hands-on use of computers and computer network resources.

C. Mathematics

The University requires completion of three years of college preparatory mathematics, including either trigonometry or pre-calculus for admission as a first-year student. Further development of the quantitative ability of all students is required as part of Understanding Quantitative Reasoning.

III. Fitness Education

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

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

This requirement must be satisfied by the completion of one approved course.

IV. The Senior Experience

A senior experience offers Trinity students various ways to reflect on and unify their four years at Trinity while moving toward their post-baccalaureate goals. The manner in which the senior experience requirement may be satisfied is determined by each individual department or program offering a major. Students must complete the senior experience in the manner specified by their chosen major(s). Students with more than one major may have to

complete the senior experience in different ways for each declared major.

Departments and programs may offer one or more of the following options to majors in order to satisfy the senior experience (not all options are accepted by all departments or programs):

1. Senior Thesis (as defined by individual departments)
2. Major Capstone course (as defined by individual departments)
3. Senior Interdisciplinary Seminar (GNED 4300)
4. Senior Synthesis (GNED 4301)

Senior Interdisciplinary Seminar (GNED 4300)

The purpose of the Senior Interdisciplinary Seminar is to encourage students to reflect upon the whole of their education at Trinity, including the major and the Common Curriculum. Courses in the Senior Seminar are interdisciplinary in nature.

Senior Synthesis (GNED 4301)

A senior synthesis may take the form of a substantive paper or project in which the student makes connections among courses in the five Understandings.

V. The Understandings

- Understanding Cultural Heritage
- Understanding the Arts and Literature
- Understanding Human Social Interaction
- Understanding Quantitative Reasoning
- Understanding Natural Science and Technology

The Common Curriculum is designed to involve all students in learning in these fundamental areas, which represent the essentials of a liberal arts education. The courses will, where appropriate, include the development and demonstration of writing and speaking skills.

In order to ensure breadth in the Common Curriculum, the following restrictions apply:

1) A student may take no more than seven hours in a single department to satisfy these requirements.
2) In no case may a student apply a single course to satisfy more than one of the Understandings.
3) Should a given course be certified as meeting the criteria of more than one of the Understandings, students taking that course for Common Curriculum purposes must decide, in consultation with their advisors, the Understanding to which it will actually apply.
4) Neither the First-Year Seminar nor the Writing Workshop may be used to meet the requirements of any of the Understandings.

The Understandings

Understanding Cultural Heritage

Understanding the traditions that underlie the world's cultures. Three courses, at least one from each of the following two categories:

- Traditions Indigenous to Africa, Asia, the Americas, Australia, and Oceania
- Greco-Roman, Jewish, and Christian Traditions through the Early Modern Period

(9 hours)

Rationale:

The primary emphasis in these courses is on cultural character, how societies have defined themselves through their beliefs and customs and how these definitions have changed through time and from culture to culture. Text-based courses in the Understandings analyze documents in order to illuminate larger historical and cultural processes. To encourage students to enlarge their horizons in both time and space, the Understanding is subdivided between traditional "western" cultures and "non-western" cultures, and includes courses that concentrate on the past. Since most Trinity students are already immersed in contemporary western culture, this Understanding requires students to have an understanding of at least one culture indigenous to Africa, Asia, or the Americas, and to have an understanding of the formation of western culture from the ancient Greeks through the early modern period. The goal of this Understanding is to encourage the development of a historically-informed, critical understanding of various cultural traditions.

Criteria:

Traditions Indigenous to Africa, Asia, the Americas, Australia, and Oceania

- Courses emphasize the cultural traditions indigenous to Africa, Asia, the Americas, Australia, or Oceania.
- Courses emphasize larger historical and cultural processes, with an emphasis on cultural character.

Greco-Roman, Jewish, and Christian Traditions through the Early Modern Period

- Courses address the foundations of Western culture, from the ancient Greeks through the early modern period.
- Courses emphasize larger historical and cultural processes, with an emphasis on cultural character.

Understanding the Arts and Literature

Understanding the arts and literature as principal ways of expressing and enriching the human spirit, approached through involvement with artistic creation, performance, and theories of production and critique; and with the critical analysis of literary texts. Three courses, at least one from each of the following categories:

- Visual Arts, Music, Performance, and Aesthetic Production
- Literary Studies

(9 hours)

Rationale:

This Understanding reflects the fundamental importance of the arts and literature to a liberal arts education. The courses in this category approach the arts and literature from multiple perspectives. The first subdivision, “Visual Arts, Music, Performance, and Aesthetic Production,” emphasizes the production of art as well as theories of production, performance, and historical/cultural analysis. The second subdivision, “Literary Studies,” emphasizes the analysis of literary texts in a range of historical/cultural and rhetorical contexts. The goal of courses in both subdivisions is for students to cultivate contextual awareness, intellectual independence, and creative insight through a process of aesthetic engagement.

Criteria:

Visual Arts, Music, Performance, and Aesthetic Production

Courses emphasize at least one of the following:

- close study of art work in a range of contexts
- theories and techniques of aesthetic production and performance
- active participation in aesthetic production and performance

Literary Studies

Courses emphasize at least one of the following:

- close study of the literary text in a range of contexts
- theories and techniques of literature and literary production

Understanding Human Social Interaction

Understanding the behavior of individuals and groups within social, historical, and institutional contexts, focusing on the ways in which the social sciences and humanities seek to understand human behavior and social cultures, and providing an in-depth investigation of significant social issues and cultural values that help shape individual and social choice. Three courses are required to satisfy this Understanding:

- Approaches to the Social Sciences (2 courses)
- Social Issues and Values (1 course)

(9 hours)

Rationale:

This Understanding addresses the broad range of human behavior, along with its causes and consequences. The goals of this Understanding are (1) to explain the behavior of humans in their capacity as individuals as well as social agents through the theoretical and methodological approaches of social sciences disciplines; and (2) to reflect upon formation of cultural values and their complex interplay with human choices and actions.

Criteria:

Approaches to the Social Sciences

- Courses utilize at least one of the basic theoretical, analytical, or methodological approaches of one of the social sciences; and
- Courses impart the substantive character of its discipline, elucidating the selected approach or approaches within the broader context of the chosen discipline.

Social Issues and Values

Courses emphasize at least one of the following:

- Ways of comparing, critically assessing, and choosing social values
- Application of values to human choice, social issues, and/or society itself
- Application of the methods of at least one of the social sciences in understanding a significant social issue or institution

Understanding Quantitative Reasoning

Understanding mathematics, symbolic abstraction, and quantitative analysis as modes of cognition and tools in problem solving. (1 course, 3 hours)

Rationale:

This Understanding introduces students to methods of thought and language indispensable to a liberal education, to enlightened citizenship in an increasingly technological age, and to understanding of scientific and social phenomena. The goals of this Understanding are (1) to give students an appreciation of the cognitive power of quantitative methods and their applications; (2) to provide them with a framework for problem solving; and (3) to endow them with tools to organize and interpret information and to make informed decisions.

Criteria:

- Courses explore complex problems mathematically and teach problem solving within a structured mathematical framework.
- Courses include symbolic formulation and analysis.
- Courses interpret quantitative results and strive for the understanding of the mathematical apparatus.

Understanding Natural Science and Technology

Understanding the foundations and methods of the natural sciences and technology. Understanding ways that natural science and technology impact humans, society, and the environment. Two courses are required to fulfill this Understanding. One course must focus on the fundamentals of a natural science, and one course must actively involve the student in using scientific methods to explore physical or biological phenomena or technology. One of the two courses may fulfill both the natural science and use of scientific methods requirements. (2 courses, at least 6 hours)

Rationale:

This Understanding addresses the need of all students to understand the implications and benefits of science and technology, along with an appreciation of the potential and the limits of science and technology to address societal needs. The goal of the courses in this category is to promote greater literacy in science and technology by teaching students to understand the fundamental nature of science, the methods and results of the natural sciences, the methodologies of science and technology, and the relationship between science and technology.

Criteria:

All courses study the methods and results of the scientific study of the natural universe or the methods and results of applied science, engineering, and technology. Courses may also focus on the impacts of science and technology on humans, society, and our world. These impacts may include ethical, environmental, social, or philosophical issues. Courses satisfying the natural science and using scientific methods requirements must also meet the following additional criteria:

Natural Science

- Courses relate scientific results and methods to phenomena in the natural universe. These phenomena include physical, biological, chemical, and geological processes.
- Courses use the theories, results, and methods concerning one or more of these classes of phenomena.

Using Scientific Methods

- These courses actively involve the student in using scientific methods to study physical or biological phenomena or technology.
- Activities should include understanding the design of experiments, acquisition of data, analysis of data, drawing conclusions, and the testing of conclusions.
- These activities may be integrated in the course or may take place in a coupled laboratory course.

THE MAJOR

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.

After students achieve sophomore standing and before achieving junior standing, they must apply for admission to the chair of the department in which they wish to major or to the chair of the committee administering the chosen interdepartmental major. Application forms for this purpose are available in the Office of the Registrar. When the student is accepted, a copy of this form showing acceptance by the chair should be filed with the Office of the Registrar, a copy given to the student, and a third copy retained in the departmental office.

Students may be accepted without conditions or accepted on a provisional basis for one semester. Provisional status, if imposed, should be noted on the application forms. At the end of the provisional semester, the chair will notify the student and the Office of the Registrar of the final decision of the department. Students denied acceptance for a major and unable to achieve approval in another major area must withdraw from the University.

A student who must withdraw from the University because he/she cannot achieve approval in a major may appeal the denial of acceptance for a major to the Vice President for Academic Affairs and Dean of the Faculty. The student must make the appeal in writing within ten days of the decision to deny his or her acceptance to a major, stating reasons for the appeal and explaining any extenuating circumstances. If the student is not satisfied with the Vice President's decision, he or she may appeal to the President of the University.

INTERDISCIPLINARY SECOND MAJOR

Students may create their own second major. This interdisciplinary major is designed and pursued in close conjunction with faculty in the relevant departments and approved in advance by the beginning of the junior year by the interdisciplinary second major program (ISMP) council on individually designed majors. It is the responsibility of the student to select the courses that will make up his or her interdisciplinary second major and to demonstrate that these courses construct a rigorous and comprehensive learning path not possible under a currently existing major.

BEYOND THE CLASSROOM: TRINITY UNIVERSITY'S INTENSIVE LEARNING EXPERIENCE

Students may earn credit for intensive academic experiences that take place outside of the normal classroom environment, and outside the conventional academic schedule. Examples include, but are not limited to, research projects, field trips, theater productions, and travel for musical performance or language study. They involve close guidance, supervision, or collaboration with individual faculty who organize and administer the courses. For policies governing these courses, consult the "Proposal to Create a Beyond the Classroom Experience" on the University Curriculum Council web page: http://www.trinity.edu/departments/academic_affairs/aahome/Curriculum/curriculum.htm.

THE MINOR

A minor consists of at least 18 semester hours, no fewer than nine of which must be taken at Trinity, and no fewer than nine of which must be upper division. (Exception: for the requirements for a minor in French, German, Russian, or Spanish, see the Modern Languages and Literatures section of this bulletin; for

the requirements for a minor in Greek or Latin, see the Classical Studies section.) Consult the appropriate departmental section of this bulletin for specific courses required for each minor. Courses counted toward a minor may not be taken Pass/Fail unless the course is offered exclusively on a Pass/Fail basis. A minor is not required for the completion of any Trinity degree.

GRADUATION WITH HONORS

Departmental/Major Honors

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

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

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

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

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

University Honors

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

PHI BETA KAPPA

Phi Beta Kappa, the nation's oldest and most prestigious academic honor society, founded in 1776, elects students with broad cultural interests and scholastic achievement. The Epsilon of Texas Chapter at Trinity University, installed in 1974, is one of 276 chapters at distinguished colleges and universities in the United States. Selection of student members, or members-in-course, is generally made in the student's senior year, although a few juniors (usually three or four) are elected each year. The names of those elected are announced prior to graduation in the spring semester. Students do not apply for election to Phi Beta Kappa; the Chapter screens student records.

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

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

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

RESIDENCY REQUIREMENT

At least 60 semester hours, including the last 30, must be earned in residence to complete a baccalaureate degree. At least 15 semester hours of the major must be earned in residence and at least 12 of those hours must be upper division.

Exceptions for study abroad: Students with 60 or more semester hours earned at Trinity who wish to enroll in an approved study abroad program in their senior year may be exempted from the last 30 hours-in-residence requirement. Students who transfer to Trinity with 50 or more credit hours may count up to 15 semester hours of approved study abroad credit toward the 60-hour residency requirement. These same exceptions apply to special semester domestic programs approved by the Office of Study Abroad.

PREPROFESSIONAL PROGRAMS

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

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

Health Professions Advisory Committee

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

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

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

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

Law schools do not usually require specific courses as prerequisites to application. Therefore, advisors 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 tailored to the needs and questions of individual students. It consists of exercises in faith development, participation in initiatives in ministry, reflection on interactions with congregations, and accessing national resources for students intrigued by such professions.

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

GENERAL DEGREE REGULATIONS

AWARDING OF DEGREES

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

APPLICATION FOR A DEGREE

A candidate for an undergraduate degree must file an application for the degree in the Office of the Registrar. Dates are specified in the University calendar as deadlines for applying for degrees. Candidates for degrees at winter commencement must apply by the last class day in April; candidates for spring commencement must apply by the first day of classes in December; and candidates for summer graduation must apply by the last day in June.

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

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

BULLETIN REQUIREMENTS

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

MUSIC ENSEMBLES

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

INTERPRETATION OF DEGREE REQUIREMENTS

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

ENROLLMENT INFORMATION
UNDERGRADUATE STUDIES

ADMISSION POLICY

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

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

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

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

ADMISSION MINIMUM COURSE REQUIREMENTS

Minimum secondary school course requirements include four years/credits of English, three years/credits of college preparatory mathematics including either trigonometry or precalculus, 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 must be achieved in each course.

ADMISSION DEFICIENCIES

Students admitted to Trinity who have not completed the minimum secondary school course work (outlined in the Admission Minimum Course Requirements section) must register for college courses that remove the deficiencies at the earliest time such college courses are available. The conditions are absolved for such courses in which a grade of C- or better is made. A one-semester course in a subject at the college level will absolve one year of deficiency and a full-year course will absolve two years of deficiency. A mathematics deficiency must be removed by completing a MATH course from this bulletin or an equivalent course.

The Office of the Registrar will enforce removal of deficiencies. Deficiencies may not be waived by faculty advisors. Any exception to policy regarding a deficiency would require approval by the Office of Academic Affairs.

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 who are not permanent residents of the United States must submit the Statement of Financial Support or signed, certified bank documents demonstrating one's ability to fund a Trinity education (contact Office of Admissions for current demonstrated funds requirements). Students should submit certified English translation of documents. Trinity University will issue Form I-20, Certificate for Eligibility for Nonimmigrant (F-1) Student Status, only upon receipt of a non-refundable deposit indicating acceptance of an offer of admission.

STUDENT LEAVE

A student may take personal leave from the university for one or two semesters. The form applying for leave must be obtained from the Office of the Registrar and filed with the Registrar following consultation with the student's faculty advisor and the Dean of Students or Vice President for Student Affairs. Leave for more than two semesters can be taken only with approval of both the Vice President for Student Affairs and the Vice President for Academic Affairs and will be granted only for compelling reason. A student on leave may register for the semester of return at the time of the November or April registration, but the student is responsible for establishing contact with the Office of the Registrar and the faculty advisor in order to achieve such registration. The class schedule will normally be available on the Internet. The student on leave will also retain housing priorities similar to those that he or she was entitled to at the time of the leave.

If the purpose of the leave includes study at another college or university, permission for the leave requires the approval of the Office of the Vice President for Academic Affairs, and the justification for the leave must be the student's access to curricula not available at Trinity that is central/critical to the student's program of study. Permission to transfer credit is to be sought in the same manner as for summer school at another institution, and the student is not eligible for any kind of financial aid, including state or federally funded programs, through Trinity University. Reenrollment at Trinity for students on this type of term is dependent on satisfactory performance at the college attended. Behavior that would be deemed grounds for dismissal from Trinity will also be grounds for denial of reenrollment. Such leave that includes study is not to be confused with approved Study Abroad or approved specialized Special Studies: U.S. semesters for which credit approval and eligibility for financial aid is arranged through the International Programs Office.

READMISSION TO THE UNIVERSITY

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

Applications for readmission must be submitted to the Office of the Registrar at least two months prior to the beginning of the semester in which the student applying for readmission wishes to enroll. The Committee on Academic Standing reviews applications for readmission from students who are not in good

standing. Students readmitted to the University are responsible for making arrangements for housing and financial aid. Contact the Offices of Student Affairs and Financial Aid for more information.

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

REGISTRATION

Registration for continuing students will take place during the preceding semester. All continuing students planning to enroll for the upcoming semester must register during this period. Undergraduate students who miss this period may register late during the late registration or add/drop period of the new semester upon payment of a $100 late registration fee.

Registration for new students will be held on the opening days indicated on the Academic calendar. The late registration fee will be charged after the close of regular new student registration.

Registered students may enter modular classes starting after the beginning of the semester on or before the fourth day of the modular class by filling out the appropriate form in the Office of the Registrar. Permission of the instructor of the class is required.

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. 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 ninth full week of classes in fall and spring semesters and during the third 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 third week of the course during the fall or spring semester, or the first 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: Curriculum and Student Issues shall consult with the instructor before approving exceptions to withdrawal policies.

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.

The date of the withdrawal is important with regard to deadlines for tuition refunds as indicated in the Student Expenses section of this bulletin.

After the withdrawal deadline no student may withdraw from a class except in an emergency such as hospitalization.

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 Vice President for Student Affairs or Vice President for Academic Affairs.

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

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

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

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

HEALTH SERVICES, HEALTH RECORD, AND INSURANCE

Upon admission to Trinity University, students are required to file a health record form which includes the student's medical history, documentation of a physical examination, immunization records, and a statement authorizing medical and dental procedures in emergencies. They must also provide information about current health and hospitalization insurance.

Students admitted for the fall may obtain the required Health Record and Insurance forms from the Tiger's Lair under the "Forms and Info" tab. January admissions will receive these forms by mail. The Health Record and Insurance forms should be completed by the student and their healthcare provider and returned to Health Services before moving onto campus. Students who fail to meet these requirements may not be permitted to register for classes.

The Trinity University Health Services is a health care facility to be used by students in need of medical consultation. The service is staffed by registered nurses, and a family physician holds tri-weekly clinics by appointment. The range of service includes nursing assessment and care of illness, injuries and minor emergencies; throat cultures; administration of prescribed medications; limited laboratory testing; medical evaluation and treatment by a physician during clinic hours; and appropriate medical and dental referrals.

All students enrolled for nine or more hours of study must show proof of health and hospitalization insurance. This ensures that students can be treated in an emergency and minimizes the financial risk associated with serious illness or injury. Students who do not have a personal health insurance policy are required to purchase the group health insurance plan endorsed by the University. Continuing students are required to submit health insurance information annually in the spring and to update their insurance information with Health Services whenever changes occur.

CREDIT FROM OTHER INSTITUTIONS AND BY EXAMINATION

TRANSFER CREDIT

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

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

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

Students may transfer up to 64 semester hours to Trinity University. As an exception to this limit, students who transfer to Trinity with 50 or more credit hours may transfer an additional 15 hours of approved study abroad credit.

A maximum of 19 semester hours of transfer credit may be used to satisfy the Fundamental Understandings of the Common Curriculum, but no more than 10 of these hours may be transferred from another institution for work taken in this country after the student has matriculated at Trinity University. Transfer credit may include study abroad, appropriate credit by examination, and credit transferred from other institutions. Common Curriculum transfer credit is subject to the policy and procedure for credit from other institutions and by examination as stated in this bulletin.

Transfer credit shall satisfy the Common Curriculum requirements for the same Understanding as the equivalent Trinity University course shown on the current list of courses approved for the Common Curriculum. Transfer credit may also be approved if a course not offered at Trinity University substantially satisfies the criteria for an Understanding.

STUDY ABROAD AND OFF-CAMPUS STUDY

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

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

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

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

A Trinity student planning to study abroad and transfer the credits to Trinity must obtain approval for the program in advance. The deadline for processing program applications and approval is October 25, for Spring semester applicants; March 25, for Fall semester, Summer term, and Academic Year applicants. Students intending to study abroad should discuss this interest with their academic advisors 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 requirements for admission outlined in the Admission Minimum Course Requirements section and have met all other mandated transfer requirements as stated in the Transfer Credit section.

CREDIT BY EXAMINATION

College Board Advanced Placement Program

Trinity University allows students to earn credit prior to entrance through the College Board Advanced Placement Program. Trinity awards credit for most AP examination scores of 4 or 5. A current list of AP examinations showing the equivalent credit awarded by Trinity is available from the Registrar. The granting of credit is automatic upon receipt of official score reports. The student's academic advisor will usually have this information before the student registers for classes at Trinity.

With respect to English AP credit, six credit hours representing two classes from the range ENGL 2301, 2302, 2303, or 2304 will be given as credit (one class in English literature and one in American literature). Before declaring a major, students must choose one class from the 2301, 2302 sequence and one from the 2303, 2304 sequence to count for AP credit.

Cambridge University International Examinations

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

International Baccalaureate Program

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

Departmental Examinations

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

Credit By Examination Policies

A maximum of 36 semester hours may be acquired through 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 within the first 58 semester hours of college credit and only 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 earned in residence.

AIR FORCE RESERVE OFFICER TRAINING CORPS PROGRAM

General:

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

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

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

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

Four-Year Program:

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

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

Two-Year Program:

Students not enrolled in the GMC may apply to enter the POC under the Two-Year Program. In order to enter the POC, Two-Year Program applicants must successfully complete a six-week training encampment. The Two-Year Program is more limited than the Four-Year Program. Interested applicants should contact the Professor of Aerospace Studies at UTSA (210-458-4624) during the fall semester prior to their last two years at Trinity.

Flight Training:

The AFROTC has a very competitive program for qualified people who desire to become a pilot or navigator. There are particular physical qualifications, which include vision, height/weight, Air Force Officer Qualifying Test scores, and health history. AFROTC pilot candidates attend Introductory Flight Training, which pays for a private pilot's license if the member does not have one already.

Scholarships and Remuneration:

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

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

Uniforms and Equipment:

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

Air Force ROTC Offices (210-458-4624) are located on the fourth floor of the Multidisciplinary Studies Building (MS 4.03.36) on the University of Texas at San Antonio campus.

CORRESPONDENCE STUDY

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

TRINITY UNIVERSITY FACULTY

This faculty listing includes full-time continuing faculty members officially employed or on approved leaves of absence during the academic year 2009-2010. The dates in parentheses indicate the year the individual joined the faculty of Trinity University, followed by, when applicable, the year of the individual's most recent promotion. An asterisk denotes that the faculty member is a candidate for the degree marked.

Victoria Aarons
Professor
English (1981) (1993)
B.A., M.A., Ph.D., University of California, Berkeley

Laura Agoston
Associate Professor
Art and Art History (2001) (2004)
B.A., Yale University
Ph.D., Princeton University

Laura M. Allen
Associate Professor
Education (1994) (2000)
B.S.E., M.Ed., Ph.D., University of Arkansas

Farzan Aminian
Professor
Engineering Science (1989) (2002)
B.S., University of Oklahoma
M.S., Ph.D., Ohio State University

Carlos X. Ardavín
Associate Professor
Modern Languages and Literatures (1998) (2004)
B.A., Florida International University
M.A., Ph.D., University of Massachusetts, Amherst

Alan M. Astro
Professor
Modern Languages and Literatures (1985) (1999)
B.A., Cornell University
M.A., Columbia University
M.A., Ph.D., Yale University

Jarrod Atchison
Assistant Professor
Speech and Drama (2007)
B.A., M.A., Wake Forest University
Ph.D., University of Georgia

Steven M. Bachrach
Dr. D. R. Semmes Distinguished Professor of Chemistry
Chemistry (1999)
B.S., University of Illinois at Urbana
Ph.D., University of California, Berkeley

Peter H. Balbert
Professor
English (1988)
B.A., University of Michigan
M.A., Ph.D., Cornell University

Eduardo Cabral Balreira
Assistant Professor
Mathematics (2006)
B.S., Lander University
M.S., Ph.D., University of Notre Dame

Carolyn Becker
Associate Professor
Psychology (1999) (2005)
B.A., Swarthmore College
M.S., Ph.D., Rutgers University

Rosana Blanco-Cano
Assistant Professor
Modern Languages and Literatures (2006)

B.A., Universidad Nacional Autónoma de México
M.A., Ph.D., Tulane University

Robert V. Blystone
Professor
Biology (1971) (1984)
B.S., University of Texas, El Paso
M.A., Ph.D., University of Texas, Austin

John R. Brazil
President of the University
Professor
English (1999)
A.B., Stanford University
M.Ph., Ph.D., Yale University

Angela Breidenstein
Associate Professor
Education (1998) (2003)
B.A., Trinity University
M.Ed., Ed.D., Teachers College, Columbia University

Mark Brodl
George W. Brackenridge Endowed Professor of Biology
Biology (2001)
B.A., Knox College
M.S., University of Illinois
Ph.D., Washington University

C. Mackenzie Brown
Jennie Farris Railey King Professor of Religion
Religion (1973) (1987)
B.A., Stanford University
Ph.D., Harvard University

Curtis Brown
Professor
Philosophy (1982) (1994)
B.A., St. Olaf College
Ph.D., Princeton University

Jenny Browne
Assistant Professor
English (2007)
B.A., University of Wisconsin
M.F.A., University of Texas, Austin

Sarah P. Burke
Professor
Modern Languages and Literatures (1973) (1986)
B.A., Ph.D., University of Texas, Austin

William T. Burke III
Associate Professor
Business Administration (1989)
B.A., Morehouse College
J.D., Howard University Law Center

Richard M. Burr
Professor
Business Administration (1972) (1984)
A.B., Huntingdon College
M.A., Ph.D., University of Alabama

Michelle M. Bushey
Professor
Chemistry (1990) (2002)
B.A., Oberlin College
Ph.D., University of North Carolina, Chapel Hill

Richard V. Butler
Professor
Economics (1982) (1990)
B.A., Pomona College
S.M., Ph.D., Massachusetts Institute of Technology

Beatrice L. Caraway
Associate Professor
Library (1990) (1996)
B.A., Louisiana State University
M.A., Colorado State University

M.L.I.S., Louisiana State University

Bert D. Chandler
Associate Professor
Chemistry (2001) (2007)
B.S., Georgia Southern University
Ph.D., University of Minnesota

Jane B. Childers
Associate Professor
Psychology (2002) (2007)
B.A., Baylor University
M.A., Ph.D., University of Texas, Austin

William G. Christ
Professor
Communication (1982) (1993)
B.A., St. Lawrence University
M.A., University of Wisconsin, Madison
Ph.D., Florida State University

Nels P. Christiansen
Assistant Professor
Economics (2009)
B.A., Kenyon College
M.A., Ph.D.*, Ohio State University

Donald N. Clark
Professor
History (1978) (1990)
B.A., Whitworth College
M.A., Washington State University
A.M., Ph.D., Harvard University

Eugene E. Clark
Professor
Physics and Astronomy (1975) (1983)
B.S., M.S., Ph.D., University of Florida

H. William Collins, Jr.
Associate Professor
Engineering Science (1981) (1987)
B.S., Trinity University
M.S., Ph.D., Purdue University

Duane Coltharp
Associate Vice President for Academic Affairs
Associate Professor
English (1993) (1999)
B.A., Missouri State University
M.A., Ph.D., University of Michigan

Stacey J. Connelly
Associate Professor
Speech and Drama (1992) (1997)
B.F.A., University of Oklahoma in Norman
M.A., Ph.D., Indiana University, Bloomington

Erwin F. Cook
T. Frank Murchison Distinguished Professor of Classical Studies
Classical Studies (2004)
B.A., University of North Carolina, Asheville
M.A., Ph.D., University of California, Berkeley

Philip L. Cooley
Dick and Peggy Prassel Distinguished Professor of Business Administration
Business Administration (1985)
B.M.E., General Motors Institute
M.B.A., University of Hawaii
Ph.D., Ohio State University

Jane Costanza
Associate Professor
Library (2001) (2007)
B.A., Northern Illinois University
M.A., Southern Illinois University
M.L.I.S., University of Illinois

David A. Crockett
Associate Professor

Political Science (1999) (2005)
B.A., Georgetown University
M.P.Aff., Lyndon B. Johnson School of Public Affairs
Ph.D., University of Texas, Austin

Ryan Daileda
Assistant Professor
Mathematics (2006)
B.S., University of Redlands
Ph.D., University of California, Los Angeles

J. Charlene Davis
Associate Professor
Business Administration (1997) (2003)
B.S., M.B.A., Ball State University
Ph.D., University of Kentucky

Rocio Delgado
Assistant Professor
Education (2005)
B.A., University of Texas, El Paso
M.A., New Mexico State University
Ph.D., University of Texas, Austin

Aaron Delwiche
Associate Professor
Communication (2003) (2009)
B.A., University of California, Berkeley
M.A., Ph.D., University of Washington

John M. Donahue
Professor
Sociology and Anthropology (1974) (1984)
B.A., M.A., Maryknoll College
Ph.D., Columbia University

Fred H. Dorner
Associate Professor
Business Administration (1977) (1984)
B.S.M.E., University of Wisconsin
Ph.D., Tulane University

Christine Drennon
Associate Professor
Sociology and Anthropology (2002) (2007)
B.A., Rochester Institute of Technology
M.A., University of Wisconsin, Madison
Ph.D., University of Texas, Austin

Rubén R. Dupertuis
Assistant Professor
Religion (2006)
B.A., University of Michigan
M.A., School of Theology, Claremont
Ph.D., Claremont Graduate University

Maurice L. Eggen
Professor
Computer Science (1981) (2003)
B.S., Northern Montana College
M.S., Ph.D., Western Michigan University

Anene Ejikeme
Assistant Professor
History (2004)
B.A., Yale University
M.A., Ohio State University
Ph.D., Columbia University

Nina C. Ekstein
Professor
Modern Languages and Literatures (1980) (1993)
B.A., State University of New York, Stony Brook
M.A., Ph.D., University of Pennsylvania

Saber Elaydi
Professor
Mathematics (1989) (1991)
B.Sc., Ain Shams University, Cairo
Ph.D., University of Missouri

Stephen L. Field

J. K. and Ingrid Lee Endowed Professor of Chinese Language and Literature
Modern Languages and Literatures (1990) (2000)
B.A., Ph.D., University of Texas, Austin

Michael Fischer
Vice President for Academic Affairs and
Dean of the Faculty
Professor
English (2000)
B.A., Princeton University
M.A., Ph.D., Northwestern University

Judith L. Fisher
Professor
English (1986) (2004)
A.B., Oberlin College
M.A., University of Tennessee, Knoxville
Ph.D., University of Illinois, Urbana

Angela Florschuetz
Assistant Professor
English (2008)
B.A., Denison University
M.A., Ph.D., Rutgers University

Thomas W. Gardner
Imogene and Harold D. Herndon Distinguished Professor of Geology
Geosciences (1995)
A.B., Franklin and Marshall College
M.S., Colorado State University
Ph.D., University of Cincinnati

Mark B. Garrison
Alice P. Brown Professor of Art and Art History
Art and Art History (1989) (2000)
B.A., University of Oklahoma
M.A., University of Ottawa
Ph.D., University of Michigan

Cynthia S. Gentry
Associate Professor
Sociology and Anthropology (1992) (1997)
B.A., Frostburg State College
M.A., Towson State College
M.A., Ph.D., Tulane University

L. Tucker Gibson
Professor
Political Science (1968) (1995)
B.A., Carson-Newman College
M.A., Oklahoma State University
Ph.D., University of Virginia

Kyle Gillette
Assistant Professor
Speech and Drama (2008)
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Psychology (2002)
B.A., University of Texas, Pan American
Ph.D., Texas Tech University

Hyon Joo Yoo
Assistant Professor

Political Science (2009)
B.A., Hankuk University of Foreign Studies
M.A., Sogang University, Seoul
Ph.D., Georgetown University

Jie Zhang
Assistant Professor
Modern Languages and Literatures (2009)
B.A., Beijing Normal University
M.A., Beijing University
Ph.D., Washington University

Yu Zhang
Assistant Professor
Computer Science (2004)
B.S., M.S., Central South University, China
Ph.D., Texas A&M University

TRINITY PROFESSORS EMERITI

Donald F. Bailey
Mathematics

Paul Baker
Speech and Drama

Harold M. Barger
Political Science

Richard A. Bartels
Physics

R. Douglas Brackenridge
Religion

John D. Brantley
English

William Breit
Economics

Frederick J. Bremner
Psychology

William A. Bristow
Art

John A. Burke, Jr.
Chemistry

Joan B. Burton
Classical Studies

Ronald K. Calgaard
Economics

D. Jeanne Callihan
Education

Jean S. Chittenden
Modern Languages and Literatures

Walter W. Coppinger
Geosciences

Joe C. Davis
Economics

Ton Devos
Political Science

Earl S. Doderer
Engineering Science

Lawrence L. Espey
Biology

Philip J. Evett
Art

Ivan W. Fitzwater
Education

Robert L. Flynn
English

J. Guthrie Ford
Psychology

Robert L. Freed
Geosciences

Rudolph M. Gaedke
Physics

Francisco O. García-Treto
Religion

Richard H. Gentry
Communication

June Grant
Education

Robert V. Hockey
Physical Education

Bates L. Hoffer
English

Robert E. Jensen
Business Administration

J. Richard Jones
Business Administration

Frank L. Kersnowski
English

Aaron Konstam
Computer Science

Kenneth C. Kramer
Psychology

William E. Kurtin
Chemistry

Earl M. Lewis
Urban Studies

John H. Lindquist
Sociology and Anthropology

Fred M. Loxsom
Physics and Astronomy

Jesse C. MacLeay
Physical Education and Athletics

Eugene C. McKinney
Speech and Drama

David L. Middleton
English

Andrew Mihalso
Music

Ruby E. Miller
Library

John H. Moore
Education

Rex C. Moyer
Biology

Harold D. Murray
Biology

Gail E. Myers
Speech and Drama

J. Norman Parmer
History

Glenn M. Patton
Art

James Pearce
Classical Studies

Rosalind Phillips
Music

Benjamin F. Plummer
Chemistry

Guy E. Poitras
Political Science

Ronald E. Prather
Computer Science

Elizabeth Ridenhower
Art

David L. Rinear
Speech and Drama

Perry O. Roehl
Geosciences

C. William Spinks
English

Jim D. Stoker
Art

John G. Stoessinger
Political Science

William H. Stone
Biology

Frances R. Swinny
Speech and Drama

Richard D. Swope
Engineering Science

Kenneth M. Taggart
Modern Languages and Literatures

Charles W. Talbot, Jr.
Art and Art History

Robert E. Tiemann
Art

William F. Trench
Mathematics

Stephen L. Tucker
Health Care Administration

Carolyn J. Valone
Art History

Karen A. Waldron
Education

Robert S. Walker

Political Science

William O. Walker, Jr.
Religion

Paul T. Walthall
Business Administration

Florence M. Weinberg
Modern Languages and Literatures

Colin M. Wells
History/Classical Studies

O. Z. White
Sociology and Anthropology

Jean W. Wilson
Education

Richard D. Woods
Modern Languages and Literatures

Michael Yost, Jr.
Education

FINANCIAL AID

FINANCIAL AID AT TRINITY UNIVERSITY

Trinity University's comprehensive financial aid program is designed to address the concerns of families at all income levels. **Merit scholarships** are offered to students who have distinguished scholastic records or special talent in the fine arts or debate. These awards are based on achievement, and recipients are selected without regard to income. The amount offered to each student will vary and does not require repayment. Merit awards are renewable for up to eight undergraduate semesters as long as the recipient meets specified criteria. **Need-based aid** is for families who may not have the resources to pay for college, and who demonstrate financial need as determined by a federal formula. This type of assistance may come in the form of grants, loans, and campus employment.

In calculating the family's expected contribution for both federal and institutional aid, many factors are taken into account: the parents' combined income, federal and state taxes paid, the parents' asset holdings, the size of the family, the number of family members enrolled in college, and the student's income and assets, as well as other considerations.

Standards of Academic Progress Policy for Financial Aid

Federal student financial aid regulations require all educational institutions administering funds to ensure that financial aid recipients are making satisfactory academic progress toward their educational objectives. The regulations apply to all students receiving federal, state, and university financial aid funds. Questions regarding this policy should be directed to a financial aid counselor.

Satisfactory Academic Progress has been defined as follows:

I. Satisfactory Progress Requirements:
ALL 3 AREAS AS DEFINED BELOW MUST BE MET TO BE IN GOOD STANDING.
Progress is reviewed at the end of each academic year.

A. Maintenance of a minimum Trinity cumulative grade point average.

1. 1.80 for first-year students (students with less than 26 total credit hours earned at Trinity)
2. 2.00 for undergraduates, excluding first-year students
3. 3.00 for graduate students

B. Successful completion of 75% of all courses taken at Trinity University.

1. Definitions:
   a. Eligible hours – number of semester hours in which grades of A, A-, B, B+, B-, C+, C, C-, D+, D, PP, or PR have been received.
   b. Ineligible hours – attempted semester hours in which grades of F, I, W, FF, have been received and semester hours earned for courses that have been repeated regardless of the grade received.
   c. Total hours – total of eligible hours plus ineligible hours.
   d. Progress rate – determined by dividing the number of eligible hours by the total hours. Progress rate must equal or exceed 75% to meet the standard.

2. Example: A student attempted one semester of courses with the following results:
   3 semester hours – grade of C
   4 semester hours – grade of FF
   3 semester hours – grade of W
   3 semester hours – grade of A
   Eligible hours = 6 (A and C grades)
   Ineligible hours = 7 (FF and W grades)
   Total Hours Attempted = 13
   Progress Rate = 6/13 x 100 = 46%

C. Normal completion time. Students are required to complete their program within a certain number of hours. They are as follows:

1. Undergraduate:
   A student will be eligible for financial aid for a maximum of 165 attempted credit hours. Transfer hours are included in the total number of credit hours attempted.

2. Graduate:
   a. A student in a 36-hour program will be eligible for financial aid for a maximum of 54 attempted credit hours. Transfer hours are included in the number of credit hours attempted.
   b. Students in programs longer than 36 hours will be eligible for financial aid for a time period of 150% of the published length of the program.

II. Satisfactory Progress Levels Defined

A. **Financial Aid Probation**
After any review period, students will be placed on Financial Aid Probation if they have not met the minimum requirements as listed in Section I. The probation will remain in effect for the next period of enrollment.

B. **Financial Aid Suspension**
Students placed on Financial Aid Probation who, after the following review period, fail to meet the minimum requirements outlined in Section I will be placed on Financial Aid Suspension. Such status will make the students ineligible for financial aid. During the period of Financial Aid Suspension, students (except those on enforced scholastic withdrawal) may attend Trinity University without any financial aid administered through Trinity's Office of Financial Aid. It will be the student's responsibility to secure other financial resources during this period. When the

minimum requirements outlined in Section I have been met, students may be reconsidered for financial aid by submitting a written appeal for reinstatement. This appeal must be submitted to the Office of Financial Aid three weeks prior to the beginning of the period for which financial aid is being sought. See Appeals process below.

C. **Permanent Ineligibility**
Students will be permanently ineligible for financial aid when they have been reinstated through the Appeals process and failed to meet the conditions of the appeal.

III. Satisfactory Academic Progress Appeals Process

A student who is denied financial aid in line with one or more of the abovementioned standards and whose financial aid has not previously been continued on appeal may appeal the denial of financial aid. The appeal must be made by submitting a written letter to the appropriate financial aid counselor after receipt of the notice of Financial Aid Suspension. The appeal will be directed to the Financial Aid Appeals committee whose decision will be final. The decision will be based on demonstration of one of the following situations:

1) Error of fact;
2) Misapplication of procedures;
3) Mitigating circumstances.

If the appeal is granted, aid will be continued for one review period. The student will be advised in writing of the action on the appeal.

Types of Financial Aid

Financial aid at Trinity comes in four forms – merit awards, grants, loans, and campus employment. Merit awards and grants are outright gifts to the student and do not have to be repaid. Merit awards are based on academic achievement, leadership, or special talent, whereas a grant only requires that a student demonstrate need. A loan is money the student may borrow with the understanding that it must be repaid upon completion of college studies or when the student, for any reason, ceases to be enrolled at least half-time (at least six hours). For some loans, interest accrues while in school. Campus employment (also referred to as “work-study”) permits a student to earn income to help with books, course-related supplies, and living expenses while enrolled.

Trinity merit and grant support is capped at tuition. Merit awards and grants, however, may come from private foundations as well as from the state and federal governments. While loan and work programs are primarily funded through federal resources, Trinity also funds various self-help assistance programs.

Outside Scholarships

Outside scholarships from other organizations are an additional way for students to contribute to the cost of a Trinity education. Scholarship awards received from sources other than Trinity must be reported to the Office of Financial Aid at Trinity. In accordance with federal regulations, external sources of aid must be counted as a resource toward meeting a student’s financial need. Students who receive external scholarships will have their need-based awards reevaluated. External awards will be used to replace student loans and campus employment before they affect need-based grants.

External Sources of Aid

External sources of aid (i.e., tuition remission, employer reimbursement, etc.) are also considered a resource and must be reported to the Office of Financial Aid. Students who receive aid from external sources will have their need-based awards reevaluated.

The Financial Aid Award

When a student’s family demonstrates need for assistance, the Office of Financial Aid will work to develop a financial aid “package” to assist that family with its educational expenses. Each award will be tailored to address the individual needs of the student and will consist of a variety of aid programs.

In packaging an award, we initially award gift aid: federal and state grants, Trinity grant funds, and possibly a Trinity merit scholarship. If a student’s demonstrated need has not been met, federal loan and employment opportunities are offered. The actual amount of gift aid and loan/employment assistance can vary according to the student’s eligibility and level of achievement.

Renewal of Financial Aid

At Trinity, we are committed to assisting students financially, provided that the student files the required forms for aid renewal by the appropriate deadline, continues to demonstrate consistent financial need, maintains satisfactory academic progress, and maintains the requisite Trinity grade point average for Trinity academic merit aid.

CHOOSE FROM SEVERAL FINANCIAL OPTIONS

Several financing alternatives at Trinity provide families with more flexibility in meeting college expenses. These options are available to all families, regardless of financial need.

Monthly Payment Plan

Trinity offers a monthly prepayment plan handled by Sallie Mae’s TuitionPay. This option allows families to pay direct college costs in 10 monthly installments from May to February. After the first year, the plan permits families to spread payments over a 12-month period. The registration fee is $55; no interest is charged.

Family Loan Programs

There are several loan programs available at reasonable interest rates for families in all financial categories. The loan programs will allow families to rely less on current income and assets to pay for college and, instead, to extend payments beyond the period of enrollment.

HOW TO APPLY FOR FINANCIAL AID

The Free Application for Federal Student Aid (FAFSA) is required of all students who wish to be considered for any form of need-based financial aid

administered by Trinity University. This aid includes Trinity grants and loan assistance, federal and state grants, loans, and campus employment. The FAFSA is not required of students who wish to be considered for only merit scholarships.

Application Instructions

Complete a FAFSA online at www.fafsa.ed.gov as soon as possible after January 1, prior to the Fall semester for each year of enrollment, but no later than May 1. Please note that funds are awarded on a first come, first served basis; students and families are encouraged to apply as early as is practical.

The Office of Financial Aid will receive the results of the FAFSA electronically as long as the student has listed Trinity University on the FAFSA (003647). Trinity will not provide a need-based financial aid award until the Office of Financial Aid receives these results, and (for new Trinity students) after the student has been notified of admission.

Additional documents are sometimes required. Students will be notified in writing of any supplemental documentation that may be necessary to determine eligibility for need-based financial assistance.

IMPORTANT DATES FOR FINANCIAL ASSISTANCE AT TRINITY

Early Decision Applicants

December 1 Merit award notices are mailed to admitted Early Decision applicants.

As early as January 1 Office of Financial Aid begins mailing financial aid notices to admitted Early Decision applicants.
File the FAFSA.

Early Action Applicants

As early as January 1 File the FAFSA.

February 1 Merit award notices are mailed to admitted Early Action applicants.

April 1 Office of Financial Aid begins mailing financial aid notices to Admitted Early Action applicants.

Regular Decision Applicants

As early as January 1 File the FAFSA.

April 1 Merit award notices are mailed to admitted Regular Decision applicants.
Office of Financial Aid begins mailing financial aid notices to admitted Regular Decision applicants.

All Financial Aid Applicants

April 1 FAFSA filing deadline for all financial aid applicants, new and returning students.

May 1 Electronic results of the FAFSA received in the Office of Financial Aid for all financial aid applicants.

Returning Students

As early as January 1 File the FAFSA.

Early June Office of Financial Aid begins mailing renewal awards to students.

Verification

Federal regulations may require us to verify the information that the student (and parents) report on the FAFSA. If the student is selected for verification, he or she must submit signed copies of his or her (and parents') federal income tax returns, W-2 forms, and any other requested documents. Students who fail to comply with the verification process may become ineligible for federal, state, and institutional awards. Differences between the data on the FAFSA and the tax returns may result in revised awards.

Complete Withdrawals

Students who withdraw from Trinity and are receiving financial aid may owe a balance to Trinity, federal, or state programs.

Financial aid will be reduced for financial aid recipients who withdraw from all classes before completing 60% of the term (based on the number of days in the term). The Office of Financial Aid will calculate the percentage of the term completed to determine the amount of aid applicable to the completed portion of the term. The unearned portion of the financial aid award must be returned to the appropriate funding sources. If funds have been awarded for indirect costs (those not related to tuition, fees, room and board), a percentage of these funds may also need to be returned. As a result, students may be required to return funds to federal sources.

Financial aid will be reduced for students with Texas or institutional fund awards, who withdraw within the first three weeks of the term, as outlined by Trinity's refund policy.

Withdrawal can result in a reduction of funds and have a significant impact on future financial aid eligibility (see Standards of Academic Progress policy).

Enrollment Criteria

For financial aid purposes, full-time, three-quarter-time, and half-time enrollment specifically refer to the number of credit hours a student is enrolled in for a given term. For enrollment in fall, spring, or summer, these terms are defined as follows:

Undergraduate students:

Full-time	=	12 or more credit hours
Three-quarter-time	=	9 to 11 credit hours
Half-time	=	6 to 8 credit hours

For financial aid purposes, undergraduate students in their final term need to be enrolled in at least 12 hours to be considered a full-time student. Students in their final term who receive merit scholarships may continue to receive the full amount of the scholarship even if enrolled less than full time. Please note, however, that Trinity gift aid (grants and scholarships) is capped at tuition.

Graduate students:

Full-time	=	9 or more credit hours
Half-time	=	6 to 8 credit hours

The Office of Financial Aid will follow the credit load for graduate students as determined by the Office of the Registrar.

For all financial aid recipients, enrollment at the end of the add/drop period of each term will determine the enrollment status, for financial aid purposes, for that term.

GENERAL INFORMATION

THE MISSION OF TRINITY UNIVERSITY: STATEMENT OF INSTITUTIONAL IDENTITY AND STRATEGIC OBJECTIVES

Trinity University is an independent coeducational university whose mission is excellence in the interrelated areas of teaching, research, and service. Trinity seeks to provide broad and intensive educational opportunities primarily to undergraduates in liberal arts and sciences, and in selected professional and pre-professional fields. It also offers a small number of selected high quality graduate programs.

Trinity University is dedicated to creating a superior intellectual environment by: recruiting, developing, and retaining outstanding faculty members dedicated to teaching, to scholarship and creative endeavor, and to service to the University and its community; identifying, and attracting talented and highly motivated students to its predominantly full-time, residential student body; and providing a supportive and challenging experience wherein students, faculty, and staff can realize the potential of their abilities and engage their responsibilities to others. Trinity respects its historic ties to the Presbyterian Church, with which it continues to have a covenant relationship.

INDEPENDENT STATUS, CHARTER, COVENANT

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

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

ACCREDITATION

Trinity University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award bachelors and masters degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, or call 404-679-4500 for questions about the accreditation of Trinity University. The Commission requests that they be contacted only if there is evidence that appears to support an institution's significant non-compliance with a requirement or standard. For more information about the Commission, please visit their web site at www.sacscoc.org.

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

A chapter of Phi Beta Kappa is active on the Trinity campus. In addition, Trinity University is approved and accredited by the Texas Education Agency, the United States Office of Education, and the American Chemical Society.

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

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

The Department of Health Care Administration is accredited by the Accrediting Commission on Education for Health Services Administration for its health care administration program.

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

NON-DISCRIMINATION AND DIVERSITY POLICY

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

Trinity University does not and will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin, disability (if otherwise qualified for the job), military/veteran status, sexual orientation, or any other status protected by federal, state, or local laws. The University is committed to making employment-related decisions according to an applicant or employee's experience, talent, and qualifications, without regard to his/her race, color, religion, sex, age, national origin, disability (if otherwise qualified for the job), military/veteran status, sexual orientation, or any other 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 Fiscal Affairs. Students with disabilities who desire accommodations should contact Disability Services for Students in Counseling 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 Fiscal Affairs.

SECURITY POLICY STATEMENT

Trinity University's campus security program is an ongoing process that includes the development and enforcement of regulations, procedures, and practices

to provide a reasonable level of security for property, information, and for the personal safety of employees, students, and visitors.

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

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

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

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 tool for faculty, staff, and students in the event of a university emergency.

TRINITY UNIVERSITY ENDOWED SCHOLARSHIP FUNDS

Trinity's goals for academic distinction are generously supported by friends and alumni of the University. Investment income from the investment of each of the following endowed scholarship funds provides continuing assistance for deserving Trinity University students.

Margaret J. Abernethy Engineering Science Scholarship Fund, provided by Dr. Lonnie L. Abernethy

Dr. Malouf Abraham, Jr. '61 Scholarship Fund, provided by Mr. and Mrs. Malouf Abraham, Sr.

James C. and Bessie Aldridge Scholarship Fund, provided by the estates of Mr. James and Mrs. Bessie Aldridge

A.B. Alexander Scholarship Endowment Fund, provided by Mr. Walter Bielstein '48

Andrew V. Allison Scholarship Fund, provided by the estate of Mr. Andrew V. Allison

Andersen & Co. Scholarship Fund, provided by alumni working for Arthur Andersen & Company and co-workers

M.D. Anderson Foundation Scholarship Fund for students of Health Care Administration, provided by trustees of the M.D. Andersen Foundation

Gilbert H. Andres Family Scholarship Fund, provided by Mr. Gilbert H. Andres

Robert V. Andrews Engineering Education Fund, provided by graduates of Trinity's Engineering Science Department

Hilda Briam Andrews Music Scholarship Fund, provided by Mr. Kent Andrews

AT&T Scholarship Fund, provided by AT&T

Raymond W. and Margaret Banowsky Scholarship Fund, provided by the estate of Mrs. Margaret P. Banowsky

Ben Benson Business Administration Scholarship Fund, provided by Mr. Wayne Hill '69, Mr. Fred Kay '68, and Mr. Jim Olafson '66

Melba A. Biard Scholarship in Music Fund, provided by Ms. Melba A. Biard

Betty Osborn Biedenham Endowed Scholarship Fund, provided by the estate of Mrs. Betty Biedenham

Blakemore Family Scholarship Fund, provided by the trustees of the West Foundation

P.B. Bookman and Ellen Bookman Peters Scholarship Fund, provided by Mr. P.B. Bookman and Mrs. Ellen Bookman Peters '32

Kathryn Bowen Scholarship Fund, provided by the estate of Ms. Kathryn Bowen

George W. Brackenridge Education Scholarship Fund, provided by the George W. Brackenridge Foundation

George W. Brackenridge Fund, provided by the George W. Brackenridge Foundation

Eugene and Juanita Brady Scholarship Fund, provided by the estate of Mr. Eugene Brady

Frances Hickerson Brown Memorial Scholarship Fund, provided by Ms. Ethel H. Brown

Frank and Dorothy Brown Scholarship Fund, provided by the estate of Mr. Frank E. Brown

Burlington Northern Santa Fe Endowed Scholarship, provided by the BNSF Foundation

Bertie Butler Memorial Scholarship Fund, provided by the estate of Ms. Mildred R. Maples

Boleyn Zilker Byrd Scholarship Fund, provided by the estate of Mr. Boleyn Zilker Byrd

D. Harold Byrd, Jr. Scholarship Fund, provided by Mr. D. Harold Byrd, Jr.

Ron and Genie Calgaard Scholarship Fund, provided by alumni, faculty, staff, parents, friends, trustees, and businesses

Carolyn Rice Calvert Scholarship Fund, provided by Mr. and Mrs. Richard Calvert

James H. Calvert Scholarship Fund, provided by Mr. and Mrs. Richard Calvert

Alyne Goad Camp Scholarship Fund for teaching, provided by Mrs. Alyne Goad Camp

Caterpillar Foundation Endowed Scholarship Fund in Engineering Science, provided by the Caterpillar Foundation

Leon and Alyne Goad Camp Scholarship Fund in Physics, provided by Dr. and Mrs. Leon Camp

Leon and Alyne Goad Camp Scholarship Fund, provided by Mrs. Alyne Goad Camp

Katherine Chrismans Cavaness Scholarship Fund, provided by the estate of Mr. Victor Cavaness ’40

John B. and Gladys W. Chadwick Scholarship Fund, provided by the estate of
Mrs. Gladys W. Chadwick

Fred A. Chapman Scholarship Fund, provided by Fred A. and Elise P. Chapman

John and Louise Chapman Scholarship Fund, provided by Mr. ’49 and Mrs. John Chapman

George Chavez Memorial Scholarship Fund, provided by the Trinity Association for Chicano Students

Barbara and Neil M. Chur Scholarship Fund, provided by Barbara and Neil M. Chur ’66;
Neil Chur Jr. ’90 and Elisabeth (Lissa) Chur Tehan, ’86, ‘88

Dr. Anson L. Clark Memorial Fund, provided by the Clark Foundation

George Dee ’32 and Johnny Jean ’33 Clark Scholarship Fund, provided by Ms. Lucy G. Clark and family

William K. Clark Scholarship Fund, provided by the estate of William K. “Billy” Clark

Elizabeth Huth Coates Scholarship Fund, provided by the trustees of the Elizabeth Huth Coates Charitable Foundation

Coca-Cola Endowed Scholarship Fund, provided by the Coca-Cola Foundation
June Cook Scholarship Fund for Creative Writing, provided in memory of Mrs. Cook by her family and many friends

Jim and Boon Coulter Scholarship Fund provided by friends and members of the Coulter family and Mr. and Mrs. Luther Coulter

Ruth Chapman Cowles and Andrew G. Cowles Scholarship Fund, provided by members of the Chapman family and by the estate of Dr. Andrew G. Cowles

Cox and Smith Scholarship Fund, provided by the associates of Cox and Smith, Inc.

Flora Atherton Crichton Scholarship Fund, provided by the Flora Cameron Foundation and
Mrs. Flora Atherton Crichton

Gilbert Cuellar, Jr. Scholarship Fund, provided by Mr. Gilbert Cuellar ’76

Dr. B.J. Deal and Polly Deal Scholarship Fund, provided by Dr. B.J. Deal

Aladar Deutsch Memorial Scholarship Fund, provided by Mr. Russell Deutsch ’58

Irene K. Dicke Scholarship Fund, provided by Mr. ’68 and Mrs. ’68 James F. Dicke II

Janet S. Dicke Scholarship Fund, provided in her honor by her husband, Mr. Jim Dicke II ’68; her son, Mr. Jim Dicke III ’93; and his wife Katy ’94

Clifton C. and Henryetta C. Doak Scholarship Fund, provided by Mrs. Henryetta Doak ’62

Doane/Calvert Scholarship Fund, provided by the F. B. Doane Foundation

James and Dorothy Doss Scholarship Fund, provided by Mr. and Mrs. James Doss

Leonard A. Duce Graduate Fellowship Fund, provided by former Trinity President Duncan Wimpress

A. Baker Duncan Scholarship Fund in the Arts, provided by the Board of Trustees of the
Brown Foundation

Genevieve and G. Cameron Duncan Family Scholarship Fund, provided by the Duncan Family

G. Cameron and Genevieve Lykes Duncan Scholarship Fund, provided by Mr. and Mrs.
G. Cameron Duncan

Penny Walzel Dwyer Scholarship Fund, provided by Mr. James V. Walzel in honor of his daughter, Penny Walzel Dwyer ‘86

Edwin Eckert Scholarship Fund in Geology, provided by Mr. and Mrs. Edwin Eckert

Ray Ellison Graduate Education Scholarship Fund, provided by a grant from the Ray Ellison Charitable Fund of the San Antonio Area Foundation

Ray Erlandson Endowed Scholarship Fund, provided by the alumni members of the former Theta Tau Upsilon Fraternity and Mr. and Mrs. Ray S. Erlandson

Ethel Evans Scholarship Fund, provided by the estate of Ms. Ethel Evans

Donald E. Everett Scholarship Fund, provided by Neil Chur, Jr. '90, Lissa Chur Tehan '86, members of the Triniteers, and other friends of Dr. Everett

Rose Muckerman Ezzell Scholarship Fund, provided by the estate of Ms. Rose Muckerman Ezzell

Tim K. and Dorothy Bayless Ferguson Scholarship Fund, provided by Mr. '31 and Mrs. Tim K. Ferguson

Jesse B. Ford (1901) Memorial Scholarship Fund, provided by Dr. '38 and Mrs. Cecil H. Hale

Maydelle Vaughan Foster Scholarship Fund, provided by Mr. Ben F. Foster

Colonel T. C. Frost Scholarship Fund, provided by Frost National Bank and members of the Frost family

Ransford S. Garnett Scholarship Fund, provided by the estate of Mrs. Aurelia G. Watkins

Andree and Jean Gaulin Foundation Scholarship, provided by the Andree and Jean Gaulin Foundation

Geology Scholarship Fund, provided by various donors

Giesecke Memorial Fund, provided by the estate of Mr. Martin C. Gieseke

David Christopher Goldsbury Scholarship Fund, provided by the Board of Trustees of Trinity University in memory of David Christopher Goldsbury, son of former trustee, Mr. Kit Goldsbury

Paul E. Golliher Scholarship Fund, provided by the Health Care Alumni Association

Reverend and Mrs. Leven B. Gray Scholarship Fund, provided by their children, Ms. Mary Leo Gray '17, Mr. Leven D. Gray, and Mr. Will H. Gray '22

Coleen Grissom Scholarship Fund, provided by alumni, faculty, staff, parents, and friends of Trinity University

Dr. Burton E. Grossman Scholarship Fund, provided by Dr. Burton E. Grossman

H.E.B. Scholarship Fund, provided by H.E. Butt Grocery Company

Ewing Halsell Scholarship Fund, provided by the trustees of the Halsell Foundation

Ewing Halsell Special Scholarship Fund, provided through trustee Mr. Gilbert M. Denman, Jr., courtesy of the Ewing Halsell Foundation

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AFRICAN AMERICAN STUDIES

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

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

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

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

I. Completion of 18 semester hours in the following distribution:

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

AFAM 1310	Introduction to African American Studies
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
SOCI 3327	Contemporary Minorities (Same 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
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 4325	Seminar in Literary Periods: Turn-of-the-Century African American Literature
ENGL 4326	Seminars on Individual Authors: Thomas Pynchon and Toni Morrison
HIST 1340	Latin American Cultural Tradition
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 (Same as ECON 3343)
MUSC 1346	Jazz History and Styles
PLSI 3302	Minorities in U.S. Politics
PLSI 3352	Civil Rights and Liberties
RELI 2318	Religion and the Civil Rights Movement

II. Additional guidelines for the selection of coursework:

A. At least 9 hours of the total shall be upper division courses.
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.
C. When departments offer a relevant "special topics" or "variable content" course, the Faculty Advisory Committee may designate such a course as meeting a relevant requirement for the minor.

III. All students are strongly encouraged to enroll in Introduction to African American Studies and African Experience.

AFAM 1310 Introduction to African American Studies
An exploration of key issues in African American studies from multiple disciplinary perspectives. Topics may include black literature,

Afrocentrism, race and social justice, rap and “world” music, blacks in prison, African American film and visual art, black families, the black middle class, black internationalism, and gender, among others.

AFAM 3310 African American Studies Internship
Supervised on- and off-campus work in an institution serving the African American community in the greater San Antonio area. The particular institution and internship experience must be arranged and approved by the student, the professor, and the institution selected. Supervision and contact with the professor must be maintained throughout the semester. May be repeated for a maximum of six hours credit. Pass/Fail only.

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

ART AND ART HISTORY

LAURA AGOSTON, Ph.D., Associate Professor, Art History
DOUGLAS BRINE, Ph.D., Assistant Professor, Art History
SARAH P. BURKE, Ph.D., Professor, Modern Languages and Literatures
MARK B. GARRISON, Ph.D., Alice P. Brown Professor of Art and Art History; Chair
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PATRICIA SIMONITE, M.F.A., Associate Professor, Art
RANDALL WALLACE, M.F.A., Studio Manager, Art
ELIZABETH D. WARD, M.F.A., Associate Professor, Art

THE MAJOR

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

I. The common curriculum

II. Declaration of Art Major

III. Departmental requirements:

Art

A. 36 semester hours of Studio Art, including ART 1310, 2330, 3314, 4394, and 4397. At least 15 hours are to be completed in upper-division courses.
B. 9 semester hours in Art History are required, including ARTH 1307 and 1308.
C. A minimum of 3 hours required from at least two of the following areas: Painting/ Drawing, Sculpture, Photography/Digital, and Printmaking.
D. Completion of the Senior Experience. During the senior year, Studio Art majors are required to have a public exhibition of art works, selected in consultation with the Studio 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 4397 in the spring.

Art History

A. 30 semester hours of Art History, including ARTH 1307, 1308, 4394, plus 21 semester hours, as follows:
   1. 4 courses (12 hours) concentrating on art produced before 1800.
   2. 3 courses (9 hours) concentrating on art produced after 1800.
   3. One of these courses must address non-Western art (ARTH 1309, 1310, 1311, 1313, 3328, 3345, and applicable special topics courses).
   4. One of these courses must focus on architectural history (ARTH 1313, 3322, 3325, 3332, 3346, 3352, 3364, 3365, and applicable special topics courses).
   5. At least 6 of these courses (18 hours) must be upper-division courses.
B. 6 semester hours (2 courses) of Studio Art in two different areas, ideally one course in a two-dimensional medium (drawing, design, printmaking, painting, photography) and one course in a three-dimensional medium (sculpture, ceramics).
C. Completion of the Senior Experience, ARTH 4394, generally offered every spring semester.
D. 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.

IV. Electives sufficient to total 124 semester hours.

ADMISSION TO MAJOR STATUS

Art

Prior to the declaration of an Art Major, the student must complete the following 9 hours with a grade of C or better:
I. ART 1310 and 2330.
II. One course from the following: ART 2340, 2350, 2360, 2370, 2372, 2374, 2380.

Art History

Completion of at least three 3-semester-hour courses in Art History or Studio Art with a grade of C or better. At least two of these must be courses in Art History.

THE MINOR IN STUDIO ART

I. 24 semester hours in Studio Art, including ART 1310, 2330, and 3314. At least 12 hours are to be completed in upper-division studio courses.
II. 3 semester hours in Art History.

THE MINOR IN ART HISTORY

21 semester hours in Art History including ARTH 1307, 1308, 2 upper-division courses before 1800, 2 upper-division courses after 1800, and one additional course of the student's choice in Art History.

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 semester hours in Studio Art and Art History, 9 hours of which must be in Art History and 9 hours of which must be in Studio Art; at least 9 hours must be upper division.

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 semester hours taken during the senior year are to be devoted to artistic work accompanied by prose explication. A full description of the program is available in the departmental office.

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

ART COURSES

GENERAL STUDIES

ART 1310 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.

ART 2305 Studio Art for Chemists
This studio-based course is offered in conjunction with its companion course, CHEM 2305: Chemistry for the Visual Artist. The application of scientific study with creative studio practice provides a dynamic platform for the making of art work. The frame work for connecting the two fields of study is supported by slide presentations, demonstrations, and studio practice. Guided studio assignments provide the students with an understanding of how the physical and chemical nature of materials can influence and inform creative thinking and artistic expression.
Corequisite: CHEM 205: Chemistry for the Visual Artist.

ART 2314 Creative Thinking and the Artistic Process
This course encourages students to synthesize a theoretical and experiential approach to the creative process as studied through the visual arts, music, creative writing, and theatre. Students enter into the creative process as a means to develop creative self-expression, aesthetic sensibility, and an understanding of the arts. The nature and drive of artistic endeavor is explored through studies of the lives of significant thinkers and artists, examination 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 DRAM 2340, ENGL 2340, GNED 2340, and MUSC 2340.)

ART 2395 Outdoor Studio
Outdoor studio meets for a 6- to 8-hour period one day a week for working excursions to outdoor sites in and around San Antonio. Students create works of art on site and gather information to create or complete work in the studio. Traditional landscape media, contemporary installation strategies, and new technologies are explored. Course includes readings and lectures addressing pertinent environmental and archaeological information to enhance understanding of the Texas landscape.

ART 3113 Guest Artist Workshop
A four-week studio course taught by visiting artists encompassing the sharing of skills and philosophical approaches to artistic problems.

ART 3314 Issues in Contemporary Art
A seminar in contemporary visual art exploring art theory, practice, and history. The thematic structure will blend historical and contemporary art criticism, exhibitions, and studio practice. The fundamental theories of art making throughout the twentieth century will be explored through the study of drawing, painting, architecture, photography, film, ceramics, and sculpture.
Prerequisite: ARTH 1307 or 1308.

DRAWING

ART 2330 Beginning Drawing
The presentation and investigation of the technical, conceptual, and aesthetic elements of drawing as they relate to the development of ideas. The study of the human figure may be included.

ART 3330 Intermediate Drawing
A continuation of ART 2330.
Prerequisite: ART 2330.

ART 4-30 Advanced Drawing

A continuation of ART 3330.
Credit may vary from 1-3 semester hours. Course may be repeated for a maximum of 9 credit hours.
Prerequisite: ART 3330.

PAINTING

ART 2340 **Beginning Painting**
A basic course in beginning painting techniques and issues in contemporary painting.
Prerequisite: ART 1310 or 2330.

ART 3340 **Intermediate Painting**
A continuation of ART 2340.
Prerequisite: ART 2340.

ART 4-40 **Advanced Painting**
A continuation of ART 3340.
Credit may vary from 1-3 semester hours. Course may be repeated for a maximum of 9 credit hours.
Prerequisite: ART 3340.

PHOTOGRAPHY

ART 2350 **Beginning Photography**
A basic course in beginning black and white photographic techniques and issues in contemporary photography.
Preference will be given to Art and Art History majors and minors and students enrolled in the New Media Minor.

ART 3350 **Intermediate Photography**
A continuation of ART 2350.
Prerequisite: ART 2350 or consent of instructor.

ART 4-50 **Advanced Photography**
A continuation of ART 3350.
Credit may vary from 1-3 semester hours. Course may be repeated for a maximum of 9 credit hours.
Prerequisite: ART 3350.

DIGITAL PHOTOGRAPHY

ART 2352 **Beginning Digital Photography**
Basic principles of digital photography as utilized in creative expression and photojournalism. Use of camera, lighting, composition and editing, as well as
instruction in the use of the digital darkroom and Adobe PhotoShop for photographic image manipulation and production techniques.
Preference will be given to Art and Art History majors and minors and students enrolled in the New Media minor.

ART 3352 **Intermediate Digital Photography**
A continuation of ART 2352.
Prerequisite: ART 2352 or consent of instructor.

ART 4-52 **Advanced Digital Photography**
A continuation of ART 3352. Credit may vary from 1-3 semester hours. Course may be repeated for a maximum of 9 credit hours.
Prerequisite: ART 3352.

PRINTMAKING

ART 2360 **Lithography and Monotype**
An introduction to the process and chemistry of lithography and monotype technique through studio experience. 4 studio hours and 4 hours outside preparation per week required. May be repeated up to 3 times.

ART 2362 **Intaglio and Relief**
An introduction to the technical and aesthetic characteristics of Intaglio and Relief through studio experience. We will address larger issues of printmaking and develop a personal vocabulary while exploring these versatile print media. 4 studio hours and 4 hours outside preparation per week required. May be repeated up to 3 times.

ART 2364 **Screen Printing**
Studio experience in screen printing techniques, including hand-drawn and photomechanically applied stencils, and issues in contemporary printmaking. 4 studio hours and 4 hours outside preparation per week required. May be repeated up to 3 times.

ART 2366 **Papermaking**
A studio course in the history and techniques of Asian and European hand papermaking. The impact of the discovery of paper on the world and the contemporary uses of hand papermaking are contextualized through the technical exploration of hand-made paper. 4 studio hours and 4 hours outside preparation per week required. May be repeated up to 3 times.

ART 2368 **Bookbinding**
Presenting the book-as-object, this course is an exploration of bookbinding through studio experience, within the context of the history of the book. With an emphasis on technical skills, we will work with a variety of binding styles and materials to understand how structure and content play off each other, discovering the boundaries of the definition of a book. 4 studio hours and 4 hours outside preparation per week required. May be repeated up to 3 times.

ART 3362 **Digital and Photo Printmaking**
An in-depth studio course using digital and photo media techniques to create a matrix in hand printmaking. Using the computer as an image-making tool, this class, combining old and new media, provides an exploration of contemporary printmaking. 4 studio hours and 4

hours outside preparation per week required. May be repeated up to 3 times.
Prerequisite: ART 2360 or 2362, or consent of instructor.

ART 3-60 Topics in Intermediate Printmaking
This course is designed for students who have already taken a course in printmaking and wish to experience a particular printmaking technique in greater
depth. The course may be taken more than once, as long as course content changes.
Prerequisites: ART 2360, 2362, 2364, or consent of instructor.

ART 4-60 Topics in Advanced Printmaking
This course is designed for students who have already taken ART 3-60 and desire to hone their technical skills and conceptual expression at the advanced level. The course may be taken more than once, as long as course content changes. May be repeated up to 3 times.
Prerequisites: ART 3-60 or consent of instructor.

SCULPTURE

ART 2370 Beginning Sculpture: Introduction to Clay
A beginning level course in sculpture focusing on clay handbuilding techniques, kiln firing, and glaze processes. Issues in contemporary sculpture will be explored.

ART 2372 Beginning Sculpture: Introduction to Small Metals
A beginning level course in sculpture focusing on metal construction techniques. Issues in contemporary sculpture will be explored.

ART 2374 Beginning Sculpture: Introduction to Wood
A beginning level course in sculpture focusing on construction techniques in wood. Issues in contemporary sculpture will be explored.

ART 3370 Intermediate Sculpture
A continuation of Beginning Sculpture.
Prerequisite: One of the following beginning levels of sculpture: ART 2370, 2372, 2374, or consent of instructor.

ART 4-70 Advanced Sculpture
A continuation of ART 3370.
Credit may vary from 1-3 semester hours. Course may be repeated for a maximum of 9 credit hours.
Prerequisite: ART 3370.

DIGITAL IMAGING

ART 2380 Digital Art
An intensive fine arts studio investigation emphasizing visual problem solving and production. Designed to build visual art making skills and computer proficiency through the introduction of structured studio problems. Emphasis on the expressive and communicative nature of images focusing on the computer as the primary creative medium.
Priority will be given to Art and Art History majors and minors and students enrolled in the New Media minor.

ART 3380 Advanced Digital Art
A continuation of ART 2380. Research and critique in Digital Art. This course may be repeated up to three times.
Prerequisite: ART 2380 or consent of instructor.

INDEPENDENT STUDY

ART 3-90 Special Work in Studio Art
Not to exceed 6 semester hours.
Prerequisite: Consent of instructor.

ART 4-91 Advanced Study in Studio Art
Research and critique in studio work.
Not to exceed 12 semester hours.
Prerequisite: Upper-division major in the department or consent of instructor.

SPECIAL TOPICS

ART 3372 Special Topics in Sculpture
From time to time special topics courses in sculpture will be offered. The course may be taken more than once, as long as the course content changes.
Prerequisite: Consent of instructor.

ART 3-91 Topics in Studio Art
From time to time special topic courses not described in the *Courses of Study Bulletin* will be offered. The course may be taken more than once, as long as course content changes.
Prerequisite: Consent of instructor.

ART 3-97 Internship
Internships are offered in a variety of professional visual art venues such as museums, galleries, and other art institutions. Such work will not exceed 10 hours per week. 1-3 hours per semester, maximum of 6 semester hours. Pass/Fail only.
Prerequisites: Junior or senior standing art major or minor and consent of department chair.

ART 3398 Honors Readings
Independent study in selected areas in preparation for Honors Thesis.
Prerequisite: Admission to Honors Program.

ART 4394 Senior Seminar

A combination of seminars, readings, and museum/gallery visits in preparation for portfolio development, senior exhibition, graduate study, and preparation for other art related professions. Fall semester only. This course, in combination with ART 4397, fulfills the Senior Experience requirement of the University's Common Curriculum.
Prerequisite: Senior standing with major in Studio Art.

ART 4396 Gallery Practicum
Gallery Practicum is a hands-on course offering instruction and experience in all aspects of the organization and installation of art exhibitions. Students will learn professional gallery management practices by researching exhibition content, arranging loans of artwork, and creating checklists, didactic labels, and brochures. Through organizing and installing exhibitions in the university gallery, they will gain valuable experience in the selection, proper handling, placement, hanging, and lighting of works of art in exhibitions.
Prerequisite: At least one course in Studio Art or Art History.

ART 4397 Senior Studio
Concentrated advanced study in studio art in preparation for the senior exhibition. This course, in combination with ART 4394, fulfills the Senior Experience requirement of the University's Common Curriculum.
Prerequisite: ART 4394. Senior standing with major in Studio Art or consent of department chair.

ART 4398, 4399 Honors Thesis
Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors students in both semesters of their senior year.

ART HISTORY COURSES

LOWER DIVISION

ARTH 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, ENGL 1301, and FILM 1301.)

ARTH 1307 Art History I: Prehistoric through Medieval Art
This course aims to present works of art in their historical context with emphasis on the cultural values revealed in selected examples of painting, sculpture, and architecture, and to acquaint students with the fundamental principles of artistic design to further enjoyment of works of art. The humanist tradition of Greek and Roman art, and its relationship to the Judeo-Christian tradition of Early Christian and Medieval art, will be studied.

ARTH 1308 Art History II: Renaissance to Modern Art
The course is a continuation of ARTH 1307, though it may be taken independently. The course focuses particular attention on the humanist traditions of the Renaissance; the influence of religion, philosophy, science, and political patronage in the seventeenth and eighteenth centuries; and the impact of industry and modernity in the nineteenth and early twentieth centuries.

ARTH 1309 Introduction to Asian Art: India
The origins and development of art and architecture in India set within the religious, political, and social context.

ARTH 1310 Introduction to Asian Art: China
The origins and development of art and architecture in China set within the religious, political, and social context.

ARTH 1311 Introduction to Asian Art: Japan
The origins and development of art and architecture in Japan set within the religious, political, and social context.

ARTH 1313 Art and Archaeology of Ancient Egypt
A survey of the major monuments and sites of ancient Egypt. The course will trace the development of the Egyptian state from its formation down into the early first millennium BCE.

ARTH 2301 International Cinema
This course focuses on the cultural and critical analysis of international films as an expression of particular artistic genres and/or styles within specific historical, ideological, and cultural contexts. Films selected have achieved wide, critical acclaim; others reveal unique and important visions of human experience; while still others are selected for their political, ideological, or sociological significance. Students should develop an awareness that the medium of film has a history and that its history is not confined to national boundaries. (Also listed as COMM 2301, ENGL 2300, FILM 2301, and ML&L 2301.)

UPPER DIVISION

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

ARTH 3320 The Minoan-Mycenaean Civilization
This course deals with the rediscovery of the Aegean Bronze Age civilizations of Crete and Mycenae, using an interdisciplinary approach based on material from archaeology, anthropology, and the Homeric epics.

ARTH 3321 Greek Vase Painting
The development of the shape and decoration of Greek pottery from the Geometric period through the end of the Classical era. The characteristics of individual artists and the treatment of Greek myths in different periods are studied.

ARTH 3322 Greek Architecture
The development of Greek architecture from the Geometric period through the Hellenistic period. The development of the temple is emphasized, but private and public buildings, city planning, and religious sanctuaries are also considered.

ARTH 3325 Roman Art and Architecture
This course examines the major monuments and art styles in the city of Rome and the Roman provinces from the Republic to the Imperial period, ending with the reign of Constantine the Great.

ARTH 3328 Art and Archaeology of Mesopotamia and Persia
An examination of the archaeology of Mesopotamia (modern Iraq) and Persia (modern Iran), focusing on the visual expression of royal power in art and architecture.

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.

ARTH 3332 Medieval Art
The art of the Middle Ages from the sixth to the fourteenth centuries in Europe and the Mediterranean region. Byzantine, Barbarian, Romanesque, and Gothic works will be studied in the contexts of contemporary history, thought, and literature.

ARTH 3335 Pre-Columbian Art of Mesoamerica
This course is a survey of the art of Mesoamerica and will examine the art of the Olmec, Western Mexico, Gulf Coast, Teotihuacan, Maya, Toltecs, Zapotecs, Mixtecs, and the Aztecs. Art mediums will include architecture, sculpture, ceramics and other portable art, murals, ancient manuscripts such as codices, jewelry, and even graffiti. Students will have an opportunity to work with materials on and off-exhibit in the Pre-Columbian collection at the San Antonio Museum of Art for their research papers.

ARTH 3338 Culture and Creativity in the Middle Ages and Renaissance
A course focusing on the interrelation of art, music, literature, and history at significant moments in the Middle Ages and Renaissance. The goal is to make it possible for students to draw new connections between the areas of culture dealt with in the course. The syllabus may include such important cultural figures and works as: Charlemagne, Gregorian chant, *The Song of Roland*, Thomas Aquinas, motets, Michelangelo, and Shakespeare. The course will combine lectures with detailed work in discussion sections. (Also listed as ENGL 3305, MDRS 3301, and MUSC 3351.)

ARTH 3340 Northern Renaissance Art, 1300-1550
Whether called late medieval or Renaissance, this period in northern Europe was a new era of discovery for painting and with painting. How pictures were made to serve the requirements of both nature and the supernatural is the leading theme of this course, which traces developments in painting from Van Eyck to Dürer.

ARTH 3341 Early Renaissance Art in Italy
This course will deal with the art and architecture of fifteenth-century Italy, with emphasis on Florence. The cultural context of Humanism will be explored, as well as the social and political currents that influenced the art of the period.

ARTH 3342 High Renaissance Art and Mannerist Art in Italy
This course deals with the art and architecture of sixteenth-century Italy. The first half of the course focuses on papal Rome, and the work of Leonardo da Vinci, Michelangelo, Bramante, and their followers, in relationship to the social and cultural currents of the time. The second half of the course broadens the focus to include other Italian centers and the impact of Mannerism on both monumental and decorative arts.

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.

ARTH 3344 Netherlandish Art in the Age of Bruegel, Rubens, and Rembrandt
Covering the period from 1500 to 1700, this course investigates the nature of an art that altered fundamental perceptions of the world while defining conflicting values in the cultures of Catholic Flanders and Protestant Holland. It also examines why certain categories of painting, such as landscape, still-life and genre scenes, arose and flourished in this period.

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.

ARTH 3347 Art of the Eighteenth Century
A study of the visual arts and architecture of the eighteenth century, focusing on France and England, from the age of the Absolute Monarchy of Louis XIV to the upheaval of the French Revolution.

ARTH 3350 Neo-Classicism to Realism
This course will focus on French art from the Revolution of 1789 until the establishment of the Second Empire, tracing the political and social context of Neo-Classicism, the Romantics, and the Realists.

ARTH 3351 Impressionism and Post-Impressionism
This course deals with nineteenth-century art from the origins of Impressionism to its dissolution into the various Post-Impressionist schools (c. 1850-1900). Focusing on France, the course will stress the social and political context of the art.

ARTH 3352 Nineteenth-Century Architecture and Urbanism
This course covers architecture and urban development in Western Europe and America from the late eighteenth century to the 1890s, with special attention given to the theoretical and social contexts for major architectural movements.

ARTH 3353 Nineteenth-Century American Art
American fine arts and architecture from early nationhood to the World's Columbian Exposition of 1893. Emphasis on the cultural forces shaping the arts and artists, along with major figures and movements.

ARTH 3359 Modernism in the Visual Arts
This course examines the artistic practices and the critical accounts which constitute "Modernism" in the visual arts, from the mid-nineteenth through the twentieth century. Emphasis is given to the historical contextualization and visual analysis of key modernist artworks, combined with close readings of primary and secondary texts.

ARTH 3360 Twentieth-Century Art
A consideration of major art movements of the twentieth century, emphasizing both art historical and critical approaches. Specific course content will vary depending on the instructor.

ARTH 3362 Theories and Art of the Russian Avant-Garde
The main artistic movements and artists in Russia from 1880 to 1930: Symbolism, Primitivism, Futurism, Suprematism, Constructivism. Special attention will be given to the works of Vrubel, Malevich, Kandinsky, Tatlin, and El Lissitsky.

ARTH 3363 Twentieth-Century American Art
American art and architecture of the twentieth century. Emphasis on the pluralistic character of the arts in this period, and the cultural forces shaping the arts and artists, along with major figures and movements.

ARTH 3364 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.

ARTH 3365 Contemporary Architecture
This course covers architecture and urban development from the 1960s through the present. Emphasis on the artistic, ideological, theoretical, and political factors that shape contemporary built environments, with primary focus on the United States, Western Europe, and Japan.

ARTH 3-90 Independent Study in Art History
Independent study in selected areas. 1 to 3 semester hours; may be repeated for a total of no more than 6 semester hours.
Prerequisites: 6 upper-division semester hours in Art History and consent of instructor.

ARTH 3391 Topics in Art History
From time to time special topic courses not described in the bulletin will be offered. Topics will generally cut across the chronological divisions of period courses, dealing instead with broader issues in Art History. May be repeated on different topics.

ARTH 3392 Women's Studies in Art History
Course content will vary depending on the instructor but may include some of the following: women as artists and architects, images of women in art and society, feminist methodology, or women as patrons of art. Course may be repeated with different topics for a maximum of six semester hours.

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.

ARTH 3395 Colloquium in Museum Studies
This course will provide an experiential overview of the artistic, educational, and commercial functions of the modern art museum in a colloquium setting. Students will have the opportunity to work in the classroom and on-site with museum professionals in San Antonio and the region.

ARTH 3-97 Internship
Internships are offered in conjunction with museums, art agencies, and art professionals in the San Antonio community and beyond, or may involve an introduction to visual resources management in the Department's Visual Resources Collection. Each internship must be directed by a faculty member who will draw up an agreement between the sponsoring institution or office, the student, and the department outlining the scope and requirements of the course. 1-3 hours per semester, maximum 6 semester hours. Elective credit only. Pass/Fail only.
Prerequisite: Approval by Department Chair.

ARTH 4394 Theories and Practice of Art History
This seminar, required of majors in their senior year (and recommended for minors), will give historical and methodological perspectives on the discipline of Art History. The leading approaches used in the field will be studied, using art historical writings from the Renaissance to the present. The course is generally offered each Spring semester. This course fulfills the Senior Experience requirement of the University's Common Curriculum.

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 semester hours.

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, 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.

BIOLOGY

ROBERT V. BLYSTONE, Ph.D., Professor
MARK BRODL, Ph.D., George W. Brackenridge Endowed Professor of Biology
FRANKLYN G. HEALY, Ph.D., Assistant Professor
MICHELE A. JOHNSON, Assistant Professor
JONATHAN KING, Ph.D., Associate Professor
THOMAS L. KOPPENHEFFER, Ph.D., Professor
KEVIN D. LIVINGSTONE, Ph.D., Associate Professor
KELLY G. LYONS, Ph.D., Assistant Professor
TROY G. MURPHY, Ph.D., Assistant Professor
DAVID O. RIBBLE, Ph.D., Professor; Chair
JAMES L. ROBERTS, Ph.D., Ruth C. and Andrew G. Cowles Endowed Professor of Life Sciences
JAMES R. SHINKLE, Ph.D., Professor

THE MAJOR

The Bachelor of Science program is designed to provide both a broadly based introduction to the biological sciences and an opportunity for study and research at an advanced level. The program serves students with interests in pursuing careers in the health professions, secondary education, and professions requiring a fundamental knowledge and understanding of the biological world. Students interested in graduate study in biology are strongly encouraged to elect research courses in addition to the required program of study.

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

I. The common curriculum including the Senior Experience. The Senior Experience requirement may be satisfied by completing any one of the following: GNED 4300, GNED 4301, BIOL 4201, BIOL 4399.

II. Departmental requirements:

A. 32 semester hours of biology are required and distributed as follows:
The Area A introductory core (9 hours), and five additional courses from Area B (20 hours) with at least one course from each of the following two categories: group 1 - 3425, 3426, 3427, 3434, 3440; group 2 - 3421, 3424, 3431, 3432, 3433, 3442, 3443, 3444, 3446, 3447, 3449, CHEM 3330/3131; and three additional hours in biology at the 2000 level or higher.
B. CHEM 1318/1118, 2319/2119, MATH 1307 or 1311, and MATH 1320 or PSYC 2401.
C. Two courses chosen from one of the following options:
1. CHEM 2320/2220;CHEM 3321, 3334 or ENGR 2311.
2. PHYS 1309/1111 and 1310/1112.
3. CSCI 1320; MATH 1312 or an upper division mathematics or computer science course approved by the student's advisor.
4. One course from GEOS 1304, 1305, or 1307 and one course from GEOS 2304, 2401, 3300, 3308, or 3402.
D. Completion of BIOL 4001 and 4002 with a grade of C or better.

It is recommended that students planning to undertake graduate study in the biological sciences complete more than one of the options in part C.

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, 1312, 1212 with grades of C or better in each class;
2. Completion of CHEM 1318, 1118, 2319, 2119; and
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. Prior to registration for their junior year, Honors candidates should meet with the Department Chair and should arrange for a Faculty Mentor for their Thesis Project. Completion of the Honors Program includes nine hours of research courses (BIOL 3-98, 4398, and 4399). Upon completion of BIOL 3398 and 4398, the Honors candidate must submit to the Department Chair a written request to graduate with Honors in Biology. This 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 Departmental Faculty and will be based on the quality of the written thesis and the oral presentation of that thesis.

MINOR IN BIOLOGY

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

1. Completion of BIOL 1311, 1111, 1312, 1212; and
2. Completion of three courses from Area B.

BACHELOR OF SCIENCE DEGREE IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

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

I. The common curriculum

II. Departmental requirements:

A. 47-49 credits in chemistry and biology, distributed as follows:
   i. Core Courses. BIOL 1311, 1111, 1312, 1212, 3421, 3444, CHEM 1318, 1118, 2319, 2119, 2320, 2220, 3330, 2130, 3131, 3334, and 4340.
   ii. Advanced Electives. Two courses chosen from the following list (one from each department): BIOL 3424, 3433, 3442, 3446, 3449, CHEM 3432, 4346, 4347, or the combination of 3321 and 3121.
   iii. Advanced Laboratory. One course chosen from the following list: BIOL 2191, 3-90, 3-92, CHEM 2180, or 3-90.
B. MATH 1307 or 1311 and 1308 or 1312.
C. PHYS 1111, 1112, 1309, 1310.
D. Completion of the Senior Experience is satisfied by one of the following: BIOL 4399, CHEM 4346, 4347, 4395, 4399, GNED 4300, or 4301.

Electives sufficient to total 124 semester hours.

GUIDELINES FOR ACCEPTANCE OF MAJORS

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

1. Completion of CHEM 1318, 1118, 2319, 2119, 2320, 2220 and BIOL 1311, 1111, 1312, 1212 with grades of C or better.
2. Completion of MATH 1307 or 1311 with a grade of C or better.
3. A grade point average of at least 2.0 on all other university work.

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

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

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

COURSES

BIOL 1305 Genetics and Human Affairs
The course is designed to equip students with sufficient factual knowledge to help them intelligently and critically evaluate the problems arising from the recent discoveries in genetics and related life sciences. The principles of heredity and the newer findings in molecular genetics are emphasized as they relate to such current social problems as population pressure, technology, the sexual revolution, birth defects, prenatal diagnosis, effects of drugs and pollutants on heredity, behavior, transplantation, gene cloning and transfer, biotechnology and the future of humans. BIOL 1305 and 3421 cannot both be taken for credit.

BIOL 1307 Biological Impact and Issues
The content of this course will deal with the impact of biological knowledge on the issues of society and culture. Examples of the topics to be discussed are as follows: the influence of the concepts of evolution on human thought and society; medical science and its manipulation of the human body; gene pool alteration and resultant restructuring of life; agricultural science and its effect on nutrition and human population; impact of the alteration of the environment on the biological world. 3 class hours a week for one semester.

BIOL 2180 Biomolecular Research Methods
Investigative skills for interdisciplinary research in the biological and chemical sciences. The use of modern fluorescence spectroscopy, microcalorimetry, and mass spectrometry to solve biomolecular research problems. Research topics will vary from year to year and may include protein studies, biomolecular stability, and biomolecular recognition. (Also listed as CHEM 2180.)
Prerequisites: BIOL 1312, 1212, CHEM 2319, 2119, and consent of instructor.

BIOL 2301 Advanced Placement Credit
Students earning a 4 or 5 on the Advanced Placement or 5, 6, or 7 on the higher level International Baccalaureate Biology exams will receive credit for this course.

AREA A: THE INTRODUCTORY CORE

BIOL 1311 Integrative Biology I
This course is designed to introduce students to the wide range of knowledge in the biological sciences and with the methods that have built this knowledge base. The course is organized around a series of topic-based modules, each of which will integrate modern biological approaches at the cellular, organismal, and population levels. Modules for this first semester course will include global biology change, sexual reproduction, the evolution of hemoglobin, or other contemporary topics. Grades for this course will be determined by exams on

each module, a comprehensive final exam, and take home exercises and assignments. This course is appropriate for non-science majors and will meet 3 class hours a week for one semester in the fall only.

BIOL 1312 Integrative Biology II
This course is a continuation of BIOL 1311 and builds on that material with a different set of topic based modules. Modules for this second semester course will include genetically modified organisms, metabolism, the evolution of birdsong, or other contemporary topics. Grades for this course will be determined by exams on each module, a comprehensive final exam, and take home exercises and assignments. 3 class hours a week for one semester in the spring only. BIOL 1212 must be taken concurrently.
Prerequisites: BIOL 1311/1111. CHEM 1318 is strongly recommended.

BIOL 1111 Introductory Biology Laboratory
This is an introductory laboratory course that provides an understanding of the scientific methods used to investigate biological questions and how the results of these studies are communicated. The semester is divided into three investigative modules in which student groups learn a technique, conduct an experiment or study, and write their results in the form of a scientific paper. Each group will also make a presentation on the biodiversity of particular groups of organisms. This laboratory course is appropriate for both non-science majors and science majors. Grades are determined from the reports and presentations. 3 laboratory hours a week for one semester in the fall only. BIOL 1311 must be taken concurrently.

BIOL 1212 Methods for Biological Problem Solving
This methods course for science majors develops analytical, laboratory, and field skills through small-scale exercises and investigative experiments. Biochemistry and molecular biology, organismal physiology, and ecology will be used to address the processes of experimental design and data analysis, with emphasis on calculation skills and proper application of statistics. The use of supporting organismal and literature databases in scientific investigation will be incorporated. Grades for the course will be determined by a combination of tests, problem sets, and writing assignments. 3 scheduled laboratory hours, plus 1-2 hours of follow-up laboratory work and outside reading/writing each week. BIOL 1312 must be taken concurrently.

AREA B COURSES

All of the following upper division courses have BIOL 1311, 1111, 1312, 1212, and CHEM 1318, 1118, 2319, 2119 as prerequisites.

BIOL 3421 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 plant and animal systems to investigate these basic principles. Grades will be based on exams and participation in lecture and lab. 3 class hours and 3 laboratory hours per week for one semester. Some experiments will require time outside of scheduled lab for care of experimental subjects. BIOL 1305 and 3421 cannot both be taken for credit.

BIOL 3424 Microbiology
The study of microbial organisms is of tremendous importance in our world today. This course emphasizes the basic biology of bacteria, including their varied morphology, growth and nutritional requirements, cell motility, gene regulation, mechanisms of antibiotic resistance, and bacterial interactions as populations and with other organisms. Other topics covered include viruses and the Archaea. The impact of microbes on medicine, public health, agriculture and biotechnology are discussed. In addition to exams, a research paper on a recent topic from the primary research literature in microbiology is required. The laboratory covers diverse techniques on manipulation and growth of bacterial cultures, microscopy, testing of environmental samples, bacterial genetics and molecular biology, and identification of unknown organisms. Multiple experiments are run concurrently. Students are expected to visit the lab on days other than the assigned period to monitor experiments. 3 class hours, 3 laboratory hours a week for one semester.

BIOL 3425 Adaptations of the Invertebrates
The “invertebrates” are not a natural biological group; rather this term covers a diverse array of animal phyla united only by the fact that they are not vertebrates. Many of these phyla have successfully colonized numerous habitats, survived for millions of years, and diversified into a vast array of species. How are these animal groups so successful, despite their manifest differences from us? In this course we explore the adaptations of invertebrate animals from an evolutionary and ecological perspective, with an emphasis on arthropods (which includes insects, spiders, and crustaceans), mollusks (clams, octopus, snails, etc.), annelids (such as earthworms), echinoderms (e.g., sea urchins and sea stars), and cnidarians (including jellyfish and corals). The design of the course emphasizes hands-on laboratory and field experience with the animals as well as discussion of research papers published in scientific journals. There is a mandatory weekend field trip to the Texas Gulf coast to investigate the diversity of marine invertebrates. 3 hours of lecture/discussion and 3 laboratory/field hours per week. This course is appropriate for students at the sophomore level and above.

BIOL 3426 Vertebrate Evolution
This course is an evolutionary survey of vertebrates that will focus on major evolutionary innovations and systematic relationships, and major features of the anatomy, physiology, life history, and behavior of vertebrate taxa. The laboratory includes studies of evolutionary adaptations, surveys of taxa, field trips to the San Antonio Zoo and other locales, and identification of local vertebrates. Grades for the course will be determined from lecture exams, laboratory practicals, one comprehensive final exam, and the students’ choice of a library report or field-based project. 3 class hours, 3 laboratory-field hours a week for one semester.

BIOL 3427 Plant Biology
This course is a comprehensive study of plants from a variety of perspectives including plant morphology, anatomy, physiology, evolution, and ecology. The course will also cover plant ethnobotany, biogeography, and the taxonomy of several notable plant families as well as other photosynthetic organisms. The laboratory is designed to give students experience with live and preserved specimens and laboratory and field techniques frequently associated with the study of plants. Students will apply skills learned in the core courses to the processes of experimental design and hypothesis testing by conducting experiments in plant competition that are pertinent to the current literature. Some experiments will require time outside of scheduled lab for care of experimental subjects. The course includes two week-day and one weekend field trips. 3 class hours, 3 laboratory/field hours a week for one semester.

BIOL 3431 Microanatomy
Structure-function relationships are explored through an analysis of animal histological features. The microscopy-based laboratory examines tissues by means of comparisons of normal and pathological features. Student performance is measured by in-class exams,

written reports, oral presentations, and a course project. Computer imaging and analysis are integrated into the fabric of the course along with several case studies. 3 class hours and 3 laboratory hours a week for one semester.

BIOL 3432 Vertebrate Physiology
This course is a study of the principles of homeostasis with emphasis on major vertebrate organ systems. This course begins with a detailed molecular investigation of excitable membrane physiology (nerve and muscle) followed by a systematic investigation of endocrine, cardiovascular, respiratory, renal and gastrointestinal physiology. Integrative problem sets are assigned to address the complex interactions between organ systems. Laboratory experience involves experimentation with sophisticated physiological equipment and computerized data acquisition systems to reinforce concepts presented in lecture. Lecture examinations, laboratory reports, homework problem sets, and a research paper with presentation will be used to assess student understanding in this course. 3 class hours, 3 laboratory hours per week for one semester.
Prerequisite: One 2000-level Biology course or higher.

BIOL 3433 Plant Physiology
As organisms, plants are intertwined with and extensively influenced by their physical environments. Individual cells and organs adapt independently to environmental fluctuations on a moment-by-moment basis. This course examines how plants maintain this flexibility and function as multicellular organisms. The principal focus is the regulation of biochemical and biophysical processes and how they are integrated from the cellular level to the organ level and finally into a functional whole plant. Three themes will be considered in depth: 1) the biophysics and biochemistry of water and inorganic nutrient fluxes; 2) bioenergetics and biochemistry of photosynthesis; and 3) cellular and molecular processes of signaling in development and pathogen responses. Equal emphasis is placed on processes regulated at the level of gene expression and processes where regulation occurs by modulation within pre-existing biochemical pathways. Discussion of readings from the primary scientific literature will be a regular component of course work. Laboratories will combine exercises in which quantitative data are used to demonstrate consequences of specific principles, with project-oriented experiments extending over several weeks and outside the scheduled lab period.

BIOL 3434 Ecology
This course examines the interactions that determine the distribution and abundance of animals and plants. As a primary discipline in biology, ecology overlaps broadly with many other disciplines including genetics, evolution, systematics, behavior, and physiology to name a few. Any study of ecology also requires basic mathematical and statistical knowledge. This course will examine the broad field of ecology from three different levels: individuals, populations, and communities. These levels will be covered through lectures, computer simulations, student-led critiques and student-led discussions of classic studies, and laboratory-field exercises. Most of the laboratory time will be spent on field trips. The course will also include a weekend field trip to study the fauna and flora at Government Canyon State Natural Area (typically held the weekend after spring break). Grades for the course will be determined from lecture and laboratory exams, discussions of classic papers, one comprehensive final exam, and numerous laboratory-field write-ups. 3 class hours, 3 laboratory-field hours a week for one semester.
Prerequisites: MATH 1307 or 1311 and one course selected from BIOL 3425, 3426, 3427, or ANTH 2310.

BIOL 3440 Animal Behavior
In this course we investigate the current state of knowledge in animal behavior, taking as a framework the “four questions” of behavior, as defined by Nico Tinbergen, one of the founders of the field: 1) the adaptive value of specific behaviors; 2) how behaviors have evolved over time; 3) how behaviors develop within an individual; and 4) the neural, hormonal, and physiological mechanisms underlying behavior. We give greatest emphasis to the first two questions, as addressed by the modern field of behavioral ecology. The laboratory focuses on developing skills of observation of naturally occurring behavior in the lab and field, and in the design and analysis of hypothesis-driven experiments. This course emphasizes the primary literature, through discussions of journal articles, exams analyzing data from published studies, and a semester-long in-depth literature review of a specific topic within the field of animal behavior, culminating in a final paper and a presentation to the class.
Prerequisites: MATH 1320 (Statistical Methods) or PSYC 2401 (Statistics and Methods I); Junior level standing; or consent of instructor.

BIOL 3442 Immunobiology
This course investigates the immunological mechanisms that enable animals to respond to foreign substances, and examines the experimental observations upon which current concepts are based. The underlying course theme is that while invariant properties of pathogens are recognized by elements of innate immunity, and in some instances leads to their elimination, the ability of pathogens to continually adapt and develop evasive strategies has by necessity been countered by the evolution of adaptive immune responses. Consequently, the course begins with consideration of innate immune mechanisms, which is followed by a thorough treatment of the molecular and cellular events that lead to generation of the effectors of adaptive immunity and their modes of action. The course concludes with discussion of the physiological consequences of an immune response, certain clinical manifestations of immune reactivity, and how our understanding of immune mechanisms has been applied to clinical and public health problems. 3 class hours and 3 laboratory hours a week for one semester. In addition to quizzes and examinations, a research paper is required that deals critically with a topic of current interest and is based upon the recent scientific literature.
Prerequisites: BIOL 3421 and at least one additional area B biology course or permission of instructor.

BIOL 3443 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 microscopy and through special projects involving several animal systems, including avian. Course assessment includes in-class examinations, oral presentations, and group projects. 3 class hours and 3 laboratory hours a week for one semester. Additional laboratory hours are required to monitor experiments.
Prerequisites: at least one area B biology course; BIOL 3426 recommended.

BIOL 3444 Molecular Biology
The focus of this course is the gene. The lecture portion of the course considers the major topics of gene structure, expression, duplication, and recombination. The laboratory takes an investigative approach and offers experimentation in protein electrophoresis, northern blotting, reporter gene expression, PCR-based gene cloning and sequencing, and microarray screens. Lecture and laboratory principles are reinforced through computer-based problem-solving projects using genome databanks. Grades for the course are to be determined by in-class examinations, the projects, and laboratory reports. 3 lecture hours, 3 laboratory hours a week for one semester.
Prerequisite: At least one Area B course or permission of instructor.

BIOL 3446 Cell Biology
Cells form the basic working units of organs and the systems that organs comprise. This course is designed to build an understanding of the fundamental processes that govern the operations of cells. Cells face challenges of maintaining boundaries, communicating with neighboring cells, transporting essential components across barrier membranes, generating chemical energy, regulating cell phenotype,

and maintaining cell structure. In order to function as part of a specialized tissue or organ, cells elaborate specific subsets of organelles to dedicate themselves to performing specific functions. The course will provide the background to understand the cellular mechanisms of specialized cells, and allow one to predict the underlying cellular physiology of most tissue systems. The laboratory takes an investigative approach, introducing microscopic, molecular, and biochemical tools for studying cells. Grades for the course are to be determined by in-class examinations and laboratory reports. 3 lecture hours, 3 laboratory hours a week for one semester.
Prerequisite: At least one Area B course or permission of instructor.

BIOL 3447 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. 3 class hours and 3 laboratory hours a week for one semester. Additional hours are required to monitor experiments. (Also listed as NEUR 3447.)

BIOL 3449 Endocrinology
A study of the function of the endocrine system and how it regulates the metabolic processes of living organisms. The course begins with a historical background of the science of endocrinology and then progresses from pituitary gland secretions through the endocrinology of the reproductive organs. Attention will also be given to neuro-endocrine mechanisms in lower vertebrates and invertebrates. 3 class hours, 2 discussion-demonstration hours a week for one semester.
Prerequisite: At least one area B biology course, preferably BIOL 3432 or CHEM 3330.

AREA C: TECHNIQUE AND RESEARCH CONCENTRATION

BIOL --91 Selected Topics
Study of a topic or field not covered by other courses. Lower division offerings will provide an introductory approach to a topic. Upper division courses will involve in-depth analysis of a specific area and will usually require prerequisite courses, at the discretion of the instructor. May be repeated for credit on different topics.

BIOL 3-90 Independent Study
Individual work arranged with a faculty member on problems in biology as indicated by the student's preparation and interest. Attendance at the weekly Biology Seminar is required. Credit may be from 1 to 3 hours per semester with no more than 6 cumulative credit hours possible.
Prerequisites: Consent of instructor and approval of a study/research plan submitted to the department chair prior to the semester of enrollment in the course.

BIOL 3-92 Research Internship
Off-campus study in a research laboratory arranged by the student. Prior written approval of a faculty member and departmental permission are required. Guidelines are available in the departmental office. May be repeated for a maximum of 3 credit hours. Graded only on a pass-fail basis.

BIOL 3-98 Thesis Readings
Independent study in selected areas in preparation for the Senior Thesis. Credit may be from 1 to 3 hours per semester. It is highly recommended that students complete three course hours of this experience by the end of their junior year to establish a foundation for their Thesis Research.
Prerequisite: Junior standing.

BIOL 4001 Senior Comprehensive Exam
Each September or early October, those Biology majors who have earned 90 total credit hours or 23 credit hours in Biology by the end of the preceding semester, will take the Biology Major Field Test (MFT). Students will be required to attend a one-hour meeting held early in the Fall semester; the examination will be administered on a Saturday soon thereafter. Alternative arrangements will be made for students unable to take the exam at the scheduled time because of University commitments. Students will receive a grade of Pass for completion of the test, but performance on the exam will factor into the grade for BIOL 4002.

BIOL 4002 Senior Retrospective
Students will meet with their advisors during the first week of classes and schedule a series of meetings that will guide them in the preparation of a written summary addressing the following: 1) a review of each student's performance on the Biology Major Field Test (MFT) describing the strengths and weaknesses of the student's preparation; 2) a comparison of the MFT results to the courses taken and grades received; and 3) an assessment of how the student's performance might have been affected by course selection, course content or learning environment, or the student's own learning strategies. In some instances students might be advised to change their course selection for their final semester based upon their test score. Grades assigned for this course will be based on a combination of the MFT score and the quality of the student's written summary.

BIOL 4201 Biology Senior Seminar
Built around the Biology Department's seminar series, students will interact with seminar speakers visiting campus to discuss readings provided by the speaker the week before. Students will maintain a journal that briefly summarizes the readings and logs thoughts about the significance of the work, how it extends what has been learned in biology classes at Trinity, and what major questions the work raises. After the discussion, students will attend the seminar to learn about the broader context of the work. This course fulfills the Senior Experience requirement of the University's Common Curriculum.
Prerequisite: Senior standing and Biology Major.

BIOL 4351 Conservation Biology
This course will explore the cross-disciplinary nature of conservation biology, which is the applied science of maintaining the earth's biological diversity. Students will lead weekly discussions on the various sub-disciplines of conservation biology and their applications, including evolution, ecology, genetics, and economics. A detailed case history analysis of a local conservation issue will be required.
Prerequisite: An upper division course in biology or consent of instructor.

BIOL 4398 Senior Seminar and Thesis Presentation I
The purpose of this course is to provide opportunity and guidance in research under the direction of a faculty member. Students must submit a progress report to the department chair if they plan to enroll in BIOL 4399. Attendance at the weekly Biology Seminar, which consists of presentations of original research from diverse fields of Biology, is required.
Prerequisites: Senior standing, completion of BIOL 3398, and submission of a formal research proposal to the department chair prior to the

semester of enrollment in the course.

BIOL 4399 **Senior Seminar and Thesis Research II**
This course is a continuation of student projects begun in BIOL 4398. Students are required to write a thesis and make an oral presentation of their research project at an appropriate venue. Attendance at the weekly Biology Seminar is also required.
Prerequisite: BIOL 4398.

BUSINESS ADMINISTRATION

WILLIAM T. BURKE III, J.D., Associate Professor
RICHARD M. BURR, Ph.D., Professor
PHILIP L. COOLEY, Ph.D., Dick and Peggy Prassel Distinguished Professor of Business Administration
J. CHARLENE DAVIS, Ph.D., Associate Professor
FRED H. DORNER, Ph.D., Associate Professor
CARL M. HUBBARD, Ph.D., Professor
RITA D. KOSNIK, Ph.D., Professor
KEITH LINDSEY, Ph.D., Assistant Professor
KATHERINE J. LOPEZ, Ph.D., Assistant Professor
JULIE PERSELLIN, Ph.D., Assistant Professor
JOHN D. RICE, J.D., C.P.A., Associate Professor
KIM R. ROBERTSON, Ph.D., Associate Professor; Interim Chair
LINDA B. SPECHT, J.D., C.P.A., Associate Professor
EUGENIO D. SUAREZ, Ph.D., Associate Professor
DONALD F. VAN EYNDE, Ph.D., Professor
SANKARAN VENKATESWAR, Ph.D., Associate Professor
DARRYL G. WALDRON, Ph.D., Professor
DANIEL T. WALZ, Ph.D., Professor
DELI YANG, Ph.D., Richard M. Burr and Donald N. Clark Professor of International Business

THE MAJOR

The Department of Business Administration offers two undergraduate degree programs. The Bachelor of Science in Business Administration degree is designed to accommodate those students who want to pursue specialized study in the following areas of concentration: accounting, finance, management, marketing, or international business. The Bachelor of Arts degree is designed to accommodate those students who do not wish to pursue an in-depth study of one of the areas in Business Administration and who also desire to undertake a double major, where one of those majors is Business Administration. Both of these degree programs are accredited by AACSB International – The Association to Advance Collegiate Schools of Business.

Students pursuing the Bachelor of Science degree complete a core of 27 semester hours, a course in Quantitative Managerial Decision Making, at least twelve semester hours in an area of concentration, and sufficient elective hours to bring the total in Business Administration courses to at least 45 semester hours. Students pursuing the Bachelor of Arts degree complete a core of 27 semester hours and six hours of electives beyond that core.

The two degree programs are designed to fulfill the needs of students who, upon graduation, intend immediately to pursue a career in business, government, or the non-profit sector, as well as those students who plan to undertake graduate study in either Business Administration or law. This is accomplished through a core that includes those courses prospective employers are most apt to require and that are generally required as prerequisites for the Master of Business Administration degree, as well as being desired courses for graduate study in law.

Students should apply for admission to major in Business Administration early in the Sophomore year so that they may be assigned a major advisor. The advising process is an integral part of the Business Administration major as it provides a basis for the development of a comprehensive program that best meets both the academic and career objectives of the student. The general requirements for the Bachelor of Science and Bachelor of Arts degrees are listed below. For full admission to the major in Business Administration, a student must first complete ACCT 1301, BUSN 2301/ECON 2320, and ECON 1311 with grades of C or better.

MINOR IN BUSINESS ADMINISTRATION

In addition to the two degree programs offered to business majors, the Department offers a minor in Business Administration to students who would like to explore the subject of business in depth but whose primary interests lie elsewhere. Requirements for the minor are the completion of at least 24 semester hours of business courses. The following seven courses are required for completion of the minor:

ACCT 1301	Fundamentals of Financial Accounting
BUSN 2301	Statistics for Management and Economics
BUSN 3302	Legal Concepts of Business I
MIS 2301	Fundamentals of Information Systems
MGMT 2301	Management of Organizations
MKTG 2301	Principles of Marketing
FNCE 3301*	Financial Administration of Business Firms

In addition, one three-hour upper-division elective course must be taken. None of the courses used to satisfy these requirements may be taken Pass/Fail.

* Students should note that ECON 1311 is prerequisite for FNCE 3301. In order to satisfy this prerequisite requirement, ECON 1311 may not be taken on a Pass/Fail basis.

MINOR IN BUSINESS ADMINISTRATION LEGAL STUDIES

The Business Administration Legal Studies Minor is designed for students who would like to develop a practical understanding of legal theory and the rules of law applicable to public and private institutions, with emphasis on business enterprises. Students contemplating graduate studies in business, law, medicine, or other professional areas and those who intend to serve in an organizational leadership capacity would find that the Legal Studies Minor complements their major field of study.

Completion of 18 credit hours in the following distribution:

A. Completion of the following nine hours of core coursework:
   ACCT 1301 Fundamentals of Accounting
   BUSN 3302 Legal Concepts of Business I
   BUSN 3341 Legal Concepts of Business II

B. At least one three-hour course in law focusing on business regulation: BUSN/ECON 3338, BUSN 3361, ECON 3336, ECON 3339, or appropriate BUSN 3-90 or other course approved by the minor advisor.

C. At least one three-hour course in law applicable to business from a perspective other than business or economics: COMM 3362, PHIL 3353, PLSI 3351, SOCI 3350 or other law course outside of business and economics approved by the minor advisor.

D. One additional three-hour course in law from either B or C above.

Note: If a student wishes to pursue a minor in Business Administration and a minor in Business Administration Legal Studies, the courses required by one minor cannot simultaneously be counted to fulfill the requirements of the other. Moreover, a student may not major in Business Administration and receive a minor in Business Administration or a minor in Business Administration Legal Studies.

MINOR IN COMMUNICATION MANAGEMENT

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, speech communication, marketing, and business principles.

The requirement for the minor in Communication Management is the completion of 21 semester hours as follows:

Twelve hours of required study consisting of the following courses:
COMM 3362 Media Law and Policy
MGMT 2301 Management of Organizations
MKTG 2301 Principles of Marketing
SPCH 3334 Persuasion

Nine hours in elective courses from the following courses:
COMM 3324 Ethics and the Mass Media
COMM 3360 Principles of Public Relations
COMM 3361 Principles of Advertising
MGMT 3371 Human Resources Management
MGMT 3372 Organizational Behavior
MKTG 3381 Consumer Behavior
MKTG 3382 Promotion Management
MKTG 4381 Marketing Management
SPCH 3362/
BUSN 3311 Organizational Communication
*SPCH 4397 Internship

*As approved by minor advisor.

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION DEGREE

The requirements for the Bachelor of Science in Business Administration degree are as follows:

I. The common curriculum

II. A core curriculum in Business Administration (27 hours): ACCT 1301, 1302; BUSN 2301, 3302, 4301*; FNCE 3301**; MGMT 2301; MIS 2301; and MKTG 2301.

III. Completion of BUSN 3303.

IV. Completion of a concentration in Business Administration, choosing from one of the following: Accounting, Finance, Management, Marketing, and International Business. No course taken by a student may count toward more than one concentration requirement.

   A. Accounting Concentration: Students choosing this concentration must complete ACCT 3341, 3342, 3343, 4344, and BUSN 3341. Prospective students should note that this concentration only partially satisfies the educational requirements for the Uniform Certified Public Accountant Examination in the state of Texas. The Department of Business Administration offers a two-semester Master of Science in Accounting degree program. Upon completion of the program, the student is awarded the degree of Master of Science in Accounting and is qualified to take the Uniform Certified Public Accountant Examination in the state of Texas. Students interested in this program may obtain material describing prerequisite courses, the course of study, and admission procedures and requirements from the Department of Business Administration.
   B. Finance Concentration: Students choosing this concentration should complete FNCE 3352 and 4351. Additionally, students should complete 6 hours from the courses that follow: ACCT 3341, 3342, FNCE 3351 (ECON 3356), FNCE 3361 (ECON 3361), or FNCE 3353.
   C. Management Concentration: Students choosing this option should complete MGMT 3371 and 9 hours from the courses that follow: MGMT 3361, MGMT 3372, MGMT 3383, and MGMT 4371.
   D. Marketing Concentration: Students choosing this option should complete MKTG 3383, 4381, and an additional 6 hours from the courses that follow: MKTG 3361, 3381, or 3382.
   E. International Business Concentration: Students choosing this option should complete each of the following requirements (students should

note that coursework taken to complete the requirements specified under sections c) and d) below does not count toward the 45 semester hours in business courses required for the Bachelor of Science degree):

a) 9 hours from the following international business concentration area courses:
BUSN 3361, FNCE 3361, MGMT 3361, or MKTG 3361.

b) An international experiential requirement consisting of one of the following:
Completion of at least one semester of study abroad and the completion of BUSN 3396. Completion of an approved international internship, or other meaningful international work experience, and the completion of an additional 3-hour course from the international concentration list specified in section a) above.

c) One 3-hour interdisciplinary international course selected from the following (or another 3-hour non-business course approved by the International Business faculty):

COMM 3322	International Communication (Also listed as SPCH 3374.)
ECON 3318	The Global Economy
ECON 3341	Economic Development of Mexico
ECON 3342	Latin American Economic History
ECON 3347	International Trade
PLSI 3331	Political Economy of the U.S., Europe and Japan
PLSI 3342	International Law
SPCH 3372	Intercultural Communication

d) A foreign language requirement consisting of the successful completion of a foreign language course numbered 2302, or its equivalent.

The student's objective should be to take sufficient work in the above foreign language to be proficient in this language. Students who do not feel that they are proficient should consider taking additional courses in the foreign language and in the Languages across the Curriculum program if the courses are presented in a foreign language that is relevant to the student. Students are encouraged to gain exposure to a second foreign language.

V. Completion of an approved study abroad experience or the successful completion of a foreign language course numbered 2302, or its equivalent.

VI. Completion of electives to bring the total in Business Administration courses to at least 45 semester hours.

VII. Completion of the Senior Experience: BUSN 4301.

VIII. Completion of general electives outside of Business Administration sufficient to bring the total semester hours earned for a degree to 124.

A student who pursues either a major or a minor in Business Administration must take at least 50% of the Business Administration credit hours that apply toward his/her degree at Trinity University.

At least 50% of the credit hours required for a concentration in the Bachelor of Science degree in Business Administration must be taken at Trinity University.

*Students should note that ECON 1312 is prerequisite for BUSN 4301. In order to satisfy this prerequisite requirement, ECON 1312 may not be taken on a pass/fail basis.
**Students should note that ECON 1311 is prerequisite for FNCE 3301. In order to satisfy this prerequisite requirement, ECON 1311 may not be taken on a pass/fail basis.

BACHELOR OF ARTS IN BUSINESS ADMINISTRATION DEGREE

The requirements for the Bachelor of Arts Degree with a major in Business Administration are as follows:

I. The common curriculum

II. A core curriculum in Business Administration (27 hours): ACCT 1301, 1302; BUSN 2301, 3302, 4301*; FNCE 3301**; MGMT 2301; MIS 2301; and MKTG 2301.

III. Completion of a second major at Trinity University.

IV. Completion of six hours of electives in Business Administration.

V. Completion of the Senior Experience: BUSN 4301.

VI. Completion of general electives outside of Business Administration sufficient to bring the total semester hours earned for a degree to 124.

A student who pursues either a major or a minor in Business Administration must take at least 50% of the Business Administration credit hours that apply toward his/her degree at Trinity University.

* Students should note that ECON 1312 is prerequisite for BUSN 4301. In order to satisfy this prerequisite requirement, ECON 1312 may not be taken on a pass/fail basis.
** Students should note that ECON 1311 is prerequisite for FNCE 3301. In order to satisfy this prerequisite requirement, ECON 1311 may not be taken on a pass/fail basis.

MASTER OF SCIENCE IN ACCOUNTING DEGREE PROGRAM

The two-semester Master of Science in Accounting degree program is structured to develop and perfect technical, theoretical, and interpersonal skills required of accounting professionals. This degree program is accredited by AACSB International – The Association to Advance Collegiate Schools of Business. Upon completion of the program of study, the student is awarded the degree of Master of Science in Accounting and has 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:

1. Senior standing as an undergraduate student, or a baccalaureate degree.
2. 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.
3. 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 the undergraduate major.
4. Acceptable scores not more than six years old on the Graduate Management Admissions Test (GMAT).
5. Two letters of recommendation from professors or employers regarding the applicant's character, motivation, and intellectual ability.

Students who do not meet the requirements for unconditional acceptance may be considered for acceptance on a provisional basis.

COURSE OF STUDY

The Graduate Program in Accounting consists of ten graduate level courses, six of which are grounded in traditional areas of accounting study:

ACCT 5341	Accounting Theory
ACCT 5342	Accounting Information Systems
ACCT 5343	Seminar in Advanced Federal Taxes
ACCT 5344	Fraud Examination
ACCT 5345	Advanced Managerial Accounting
ACCT 5346	Advanced Financial and Nonprofit Accounting

In addition, BUSN 5349, Seminar in Law, Ethics, and Professional Responsibilities, and MGMT 5372, Conflict Management, are to be completed, along with two elective courses. Topics for graduate electives will vary from term to term.

COURSES

ACCOUNTING

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 3341 Intermediate Financial Accounting I
A comprehensive study of the conceptual bases and standards of financial accounting. The course focuses on analyzing transactions and internal events in terms of current accounting theory and applying this theory in financial reporting.
Prerequisites: ACCT 1301 and Junior standing or consent of instructor.

ACCT 3342 Intermediate Financial Accounting II
A continuation of ACCT 3341 with emphasis on accounting for shareholders' equity, debt securities, investments, pensions, leases, and other contemporary accounting topics.
Prerequisite: ACCT 3341.

ACCT 3343 Introduction to Federal Income Tax
An introduction to federal income tax law, primarily as it applies to individuals. Emphasis is placed on the various facets of calculating tax liability, the conceptual and theoretical bases of tax law, and practical problems encountered in its application.
Prerequisites: ACCT 1301 and Junior standing.

ACCT 3-90 Studies in Accounting
Designed for students wishing to continue the study of accounting beyond regularly offered courses. Credit from one to six hours. No more than a total of six hours credit may be earned in 3-90 courses in business administration.
Prerequisites: Consent of instructor and Junior standing.

ACCT 4344 Auditing
A study of accounting attestation standards and procedures. Topics include audit objectives, ethics, auditor's legal liability, generally accepted auditing standards, audit planning, and internal audit functions.
Prerequisite: ACCT 3342.

ACCT 4697 Internship in Accounting
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 2101 Corporate Social Responsibility and Human Values
This course offers a perspective on corporate social responsibility, with a focus on human values and business ethics. The course will include an opportunity to meet with CEOs and representatives of several businesses and will examine the motivation for responsible corporate governance.

BUSN 2301 Statistics for Management and Economics
Applications of statistical techniques to business and economics. Decision making based on sampling theory, parametric tests of significance, simple and multiple regression and correlation, and time series analysis. (Also listed as ECON 2320.)

BUSN 3302 Legal Concepts of Business I
Studies the American legal system, principles of the law of contracts, negotiable instruments, sales, and business ethics.

BUSN 3303 Quantitative Managerial Decision Making
The study of statistical and quantitative techniques applicable to managerial decision making including probability distributions, decision analysis, linear programming, inventory control models, queuing models, simulation, PERT, and Markov processes. Extensive application of computer assisted analysis is included.
Prerequisite: BUSN 2301.

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 SPCH 3362.)

BUSN 3313 The American Corporation
For description see ECON 3362.

BUSN 3330 The Culture of Business in China
A seminar on Sino-American cross-cultural communication in a business context. Students will read selected texts, including excerpts from Sunzi's *The Art of War*, and conduct daily discussions and role playing on such subjects as how to conduct interpersonal relationships and the strategies of business negotiation. (Also listed as CHIN 3330.)
Prerequisites: Junior standing and 6 hours of Business Administration or 6 hours of Chinese or consent of instructor.

BUSN 3338 Government Regulation of Business
Economic analysis of direct government regulatory activity. The course first explores how regulation arises from the political process. These insights, and the tools of microeconomic theory, are then applied to analyze public policy in such fields as electricity, telecommunications, broadcasting, transportation and safety. (Also listed as ECON 3338.)
Prerequisite: Three hours of upper-division Economics, or consent of instructor.

BUSN 3340 Haciendo negocios en Latinoamérica (Doing Business in Latin America)
This course is both a language and an applied business course. On the language part, it is intended to increase the Spanish proficiency in reading, writing, and speaking. The other aspect of the course includes a thorough understanding of cultural, political, and economic aspects of the Latin American business environment. Moreover, the course will immerse the student in the intricacies of exporting to, importing from, establishing a new business in, or operating a foreign branch in a Latin American country.
Prerequisites: ECON 1311, Spanish proficiency, and consent of instructor. (Also listed as INTL 3340.)

BUSN 3341 Legal Concepts of Business II
Provides the principles of the law of business organizations and regulation; agency, partnerships, corporations, property, debtor-creditor rights, bankruptcy; additional topics include trusts, wills, business and professional responsibility.
Prerequisites: BUSN 3302 and Junior standing, or consent of instructor.

BUSN 3344 Economic and Business History of the United States to 1865
A study of the development of American business and the economy through the U.S. Civil War. (Also listed as ECON 3344 and HIST 3360).
Prerequisites: ECON 1311 and 3 hours of U.S. history or consent of instructor.

BUSN 3345 Economic and Business History of the United States Since 1865
A study of the development of American business and the economy from the U.S. Civil War to the present. (Also listed as ECON 3345 and HIST 3361).
Prerequisites: ECON 1311 and 3 hours of U.S. history or consent of instructor.

BUSN 3346 La economía española y la Unión Europea (The Spanish Economy and the European Union)
An examination of Spain's economic development and its position within the European Union. The business, economic, and political transformation of Spain from a struggling nation with an authoritarian regime to an economic power with an open and democratic society are studied. The course also examines the development of the 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 NGOs in Spain. (Also listed as ECON 3346, INTL 3346, and SPAN 3346.)
Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of instructor.

BUSN 3355 Entrepreneurship and Venture Planning
This course is designed to provide a practical, comprehensive, basic understanding of entrepreneurship. The process is explored from the inception of an idea through exit strategies. Emphasis is placed on the development of a business plan with focus on legal structure, accounting, business ethics, marketing, and finance.
Prerequisites: Admission to the major in Business Administration, completion of at least 15 hours of the core curriculum in Business Administration, Junior standing, and consent of instructor.

BUSN 3361 International Business Law
Surveys the law of international trade and business with a focus on international contracts, torts insurance, and trade law.
Prerequisite: BUSN 3302 or consent of instructor.

BUSN 3372 Práctica profesional en España (Internship in Spain)
A supervised summer internship in Spain. Students enrolled in BUSN 3372 will serve as interns with various firms, trade groups, governmental agencies, or public interest groups where they will work and gain experience related to the Spanish economy and business world. The nature of the student's responsibilities will vary with the internship involved and be subject to the approval of the supervising faculty member. (Also listed as ECON 3372, INTL 3372, and SPAN 3372.)
Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of instructor.

BUSN 3-90 Studies in Business
Designed for students wishing to continue the study of business beyond areas offered in regular classroom work. Credit from one to six hours. No more than a total of six hours credit may be earned in 3-90 courses in business administration.
Prerequisites: Consent of instructor and Junior standing.

BUSN 3396 Internship in International Business
A supervised internationally oriented internship. Students enrolled in BUSN 3396 will serve as interns with various firms, trade groups, governmental agencies, or public interest groups where they will work and gain experience related to a country other than their home country. The nature of the student's responsibilities will vary with the internship involved and be subject to the approval of the supervising faculty member. To earn credit for BUSN 3396, a student must serve as an intern throughout the semester or summer term that he/she is registered for BUSN 3396. Credit will not be given for internships served prior to or after the semester or summer term in which the student is registered for BUSN 3396. Credit for BUSN 3396 will not be given for internships that are served where either the owner or manager of the host organization or the host supervisor is a relative of the student intern. Must be taken Pass/Fail. Students may earn credit for either BUSN 3396 or 3397, but not both.
Prerequisites: Admission to the major in Business Administration and a declared concentration in International Business, completion of at least 15 hours in the core curriculum in Business Administration, Junior standing, and consent of instructor.

BUSN 3397 Internship in Business Administration
Students enrolled in BUSN 3397 will serve as interns with various firms, trade groups, governmental agencies, or public interest groups on the basis on individual preferences and the availability of assignments. The nature of the student's responsibilities will vary with the internship involved and be subject to the approval of the supervising faculty member. To earn credit for BUSN 3397, a student must serve as an intern throughout the semester or summer term that he/she is registered for BUSN 3397. Credit will not be given for internships served prior to or after the semester or summer term in which the student is registered for BUSN 3397. Credit for BUSN 3397 will not be given for internships that are served where either the owner or manager of the host organization or the host supervisor is a relative of the student intern. Must be taken Pass/Fail. Students may earn credit for either BUSN 3397 or 3396, but not both.
Prerequisites: Admission to the major in Business Administration, completion of at least 15 hours in the core curriculum in Business Administration, Junior standing, and consent of instructor.

BUSN 4301 Business Policy and Strategy
A study in which decision making is emphasized through the analysis of company operations in policy formulation and administration. A course in which the student can apply knowledge acquired in other courses to business problems.
Prerequisites: Completion of all other Business Core courses, ECON 1312, and Senior standing. This course fulfills the Senior Experience requirement of the University's Common Curriculum.

FINANCE

FNCE 3301 Financial Administration of Business Firms
Financial decision making in organizations; planning and managing cash flows, raising, and allocating funds. Topics include cost of capital, capital budgeting, working capital management, and financial planning. Emphasis on non-financial corporations.
Prerequisites: ACCT 1301, ECON 1311, and BUSN 2301.

FNCE 3348 International Monetary Systems
A study of the principles and practices of foreign exchange, international money markets, the balance of payments, payments adjustment mechanism and the national policies for achieving both domestic and international objectives. Coverage includes the description and history of the relevant national and international institutions. Practice is provided in reading and understanding recent international economic events and current policy issues. (Also listed as ECON 3348.)
Prerequisites: ECON 1311 and 1312.

FNCE 3351 Financial Institutions and Markets
Analytical investigation of the structure, efficiency, and regulation of financial markets and institutions. Topics include determination of the level and structure of interest rates, asset valuation and the flow of funds between markets, theory and practice of financial intermediation, and the social utility of the financial sector. (Also listed as ECON 3356.)
Prerequisites: Junior standing and ECON 1311, 1312.

FNCE 3352 Investment Principles and Analysis
Analysis of common stock, bonds, options, and futures. Topics include financial markets, valuation of securities, technical analysis, market efficiency, and portfolio theory.
Prerequisites: FNCE 3301 and Junior standing.

FNCE 3353 Student Managed Fund I
Combines study of security analysis and portfolio management with practical demands of hands-on money management. Provides opportunity to invest university endowment funds. 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. Portfolio performance measurement. To be taken in the first semester of the academic year.
Prerequisites: FNCE 3301, 3352, and consent of instructor.

FNCE 3354 Student Managed Fund II
A continuation of FNCE 3353. Combines study of security analysis and portfolio management with practical demands of hands-on money management. Provides opportunity to invest university endowment funds. 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. Portfolio performance measurement. To be taken in the second semester of the academic year.
Prerequisites: FNCE 3301, 3352, 3353, and consent of instructor.

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.)
Prerequisite: FNCE 3301 or consent of instructor.

FNCE 3-90 Studies in Finance
Designed for students wishing to continue the study of finance beyond areas offered in regular classroom work. Credit from one to six hours. No more than a total of six hours credit may be earned in 3-90 courses in Business Administration.
Prerequisites: FNCE 3301, consent of instructor, and Junior standing.

FNCE 4351 Financial Management and Policy
Advanced study of financial theories and practices. Emphasis on case studies to develop analytical thinking about problems faced by business firms. Topics include capital budgeting, risk analysis, leasing, bankruptcy, and mergers.
Prerequisites: FNCE 3301 and Junior standing.

MANAGEMENT

MGMT 2301 Management of Organizations
This course studies the management activities and processes required to successfully attain organizational goals. It includes an introduction to the principles of decision making, leadership, motivation, conflict resolution, managerial ethics, and social responsibility. Emphasis is placed on both theory and practical application in order to prepare students for future managerial roles.

MGMT 3311 Labor Economics and Labor Relations
For description see ECON 3329.

MGMT 3361 International Management
The global marketplace, its structure and dynamics, significant economic, political and cultural influences, and global resource flows will be studied from the perspective of the management strategist. Within this context, strategy formulation and implementation, the creation of an optimal portfolio of strategic business units, and the analysis of global operating and financial flows will be studied, assuming the objective of maximizing shareholder value.
Prerequisite: Junior standing or consent of instructor.

MGMT 3371 Human Resources Management
Examines by discussion and experiential learning techniques the major activities associated with the area of Human Resource Management: equal employment opportunity, personnel planning and selection, training and management development, employee discipline, labor-management relations, and current topics such as AIDS and substance abuse in the workplace. Special emphasis is placed on practical application of this knowledge to general management in all types of organizations.

MGMT 3372 Organizational Behavior
Examines the nature of interpersonal and group relations in work organizations using behavioral science and modern management thought. A study of organizations as socio-technical systems with emphasis on communication, motivation, leadership, conflict resolution, and organizational development.
Prerequisites: MGMT 2301 and Junior standing.

MGMT 3383 Management of Health Care Organizations
This course provides the unique knowledge and skills necessary to understand and effectively manage individuals and groups in challenging health care organizations such as hospitals, medical group practices, and nursing homes. The focus is on developing a theoretical and practical approach to managerial functions as related to dealing with health care professionals and workers, developing a conceptual understanding of the health care system in which the organization operates, and understanding the relationship between the organization, its regulatory environment, and the reimbursement system. Case studies are used to provide real-world applications relevant to health care management. (Also listed as HCAD 3383.)
Prerequisite: Junior standing.

MGMT 3-90 Studies in Management
Designed for students wishing to continue the study of management beyond areas offered in regular classroom work. Credit from one to six hours. No more than a total of six hours credit may be earned in 3-90 courses in Business Administration.
Prerequisites: Consent of instructor and Junior standing.

MGMT 4371 Strategic Management
A study of the formulation and implementation of corporate level strategies such as mergers and acquisitions, retrenchment, and entrepreneurship. The course also studies current trends in the business world and features presentations by local executives.
Prerequisite: Senior standing or consent of instructor.

MANAGEMENT INFORMATION SYSTEMS

MIS 2301 Fundamentals of Information Systems
Systems theory, information quality, decision making, and the organizational role of information systems are introduced. Information technology, including computing and telecommunications systems, are stressed. Concepts of organizations, information systems growth, and process improvement are introduced.

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 Junior standing.

MKTG 3382 Promotion Management
A study of the promotion activities of business firms; analysis of consumer buying behavior and motivation; personal selling; advertising and sales promotional techniques and the development of an integrated promotional plan.
Prerequisites: 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.
Prerequisites: MKTG 2301, BUSN 2301, and Junior standing.

MKTG 3-90 Studies in Marketing
Designed for 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 Administration.
Prerequisites: Consent of instructor, MKTG 2301, and Junior standing.

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.
Prerequisites: MKTG 2301 and Senior standing.

NOTE: Trinity does not offer a Master of Business Administration degree. However, the following courses are available for graduate students admitted to master's programs in related fields, or for non-degree students to whom the University has granted graduate admission.

GRADUATE COURSES

ACCT 5341 Accounting Theory
This course will contrast financial and social accounting issues worldwide. It will review the history of accounting and the trend toward increasingly complex capital markets and financial contracts. Positive theories as to why certain practices evolved and normative theories regarding idealized practices will be contrasted.

ACCT 5342 Accounting Information Systems
This course investigates the components of accounting information systems (AIS) and dynamics of change in those systems. Focus is placed upon changing computer and networking technologies in modern accounting information systems.

ACCT 5343 Seminar in Advanced Federal Taxes
Beginning with a discussion of the sources of tax law and the basics of tax research methodology, the course will continue with coverage of corporation and shareholder taxation, taxation of partners, income taxation of trusts and estates, and the federal donative transfer taxes. Additional topics will include tax law administration, nonprofit entities, and penalty taxes.

ACCT 5344 Fraud Examination
This course utilizes authoritative pronouncements, internet resources, and case studies to examine the respective roles of the financial statement auditor and the certified fraud examiner. Moving beyond the consideration of fraud in a financial statement audit, students will develop an understanding of how and why occupational fraud is committed, how fraud might be deterred, and how allegations of fraud should be handled. Students will be expected to engage in research and problem solving.

ACCT 5345 Advanced Managerial Accounting
This course develops modern management accounting information systems for decision making and control in complex organizations. The topics include cost-volume-profit analysis, linear programming, regression analysis, activity-based costing, target costing, quality costing, and strategic cost management.

ACCT 5346 Advanced Financial and Nonprofit Accounting
This course introduces students to the accounting standards for business combinations along with applicable accounting and reporting standards. Consolidated financial statements are the major focus of the course. Foreign currency concepts are studied including foreign currency transactions, forward exchange contracts and translation under the latest rules. Nonprofit accounting focuses on accounting for universities, hospitals, and government.

BUSN 5349 Seminar in Law, Ethics, and Professional Responsibility
An in-depth analysis of present and emerging ethical issues in professional life within the legal environment of business. Emphasis will be placed upon understanding professional and legal standards regarding practice, performance, and ethical behavior.

BUSN 5390 Seminar in Business
Study of selected topics in business. May be repeated for up to six semester hours on different topics.

FNCE 5351 Financial Analysis for Decision Making
Cash flows between the firm and financial markets; financial value and its determinants; managing working capital; analyzing and planning financial performance; cost of capital and capital budgeting.
Prerequisite: Three-hour accounting course.

FNCE 5390 Seminar in Finance
Study of selected topics in finance. May be repeated for up to six semester hours on different topics.

MGMT 5371 Human Resource Management

Critical analysis of the theoretical base and current developments related to personnel activities in organizations. Recruitment and selection, remuneration and incentives, performance appraisal, and employee relations are discussed in relation to current social trends and government regulations.

MGMT 5372 Conflict Management

A study of conceptual, analytical, and communication techniques instrumental to the management of chronic and acute conflicts in a wide variety of settings. Principles and strategies of negotiation and mediation are introduced through case studies.

MIS 5381 Database Management

This course is a broad overview of the business side of the database design and management processes. This course will familiarize students with the issues, processes, and skills necessary to align database development to a business need. This course will help the student understand the key elements of a database development project and the methods used by systems analysts, such as data, file and object structures, logical design, physical design, and implementation of a Database Management System.
Prerequisite: Graduate standing or permission of instructor.

MIS 5391 Knowledge Management

This course is a survey of the principles and processes of knowledge management. This course will familiarize students with the issues that a business must address in facilitating the flow of knowledge from those in an organization who have knowledge to those who need it. This course will help the student understand key elements of the knowledge management life cycle such as knowledge creation, storage, transfer, and application; knowledge system tools; and ethical, legal, and managerial issues.
Prerequisite: Graduate standing or permission of instructor.

MKTG 5390 Seminar in Marketing

Study of selected topics in marketing. May be repeated for up to six semester hours on different topics.

CHEMISTRY

STEVEN M. BACHRACH, Ph.D., Dr. D. R. Semmes Distinguished Professor of Chemistry; Chair
MICHELLE M. BUSHEY, Ph.D., Professor
BERT D. CHANDLER, Ph.D., Associate Professor
JESSICA J. HOLLENBECK, Ph.D., Assistant Professor
LAURA M. HUNSICKER-WANG, Ph.D., Assistant Professor
NANCY STEWART MILLS, Ph.D., Professor
CHRISTOPHER J. PURSELL, Ph.D., Professor
ADAM R. URBACH, Ph.D., Assistant Professor

THE MAJOR

Four degree programs are offered to students interested in a major in chemistry. The Bachelor of Science degree in Chemistry is a four-year course of study designed for those students who plan to be professional chemists. This program meets the standards set by the American Chemical Society to train chemists for industry and graduate programs in chemistry. The Bachelor of Science degree in Biochemistry prepares students for graduate study and research in the rapidly growing areas of biotechnology and the chemistry of life processes. This program meets the standards set by the American Society for Biochemistry and Molecular Biology as well as the American Chemical Society. The Bachelor of Science degree in Biochemistry and Molecular Biology also meets the needs of students preparing for graduate studies in bioscience or for medical school. This program is more interdisciplinary than the B.S. in Biochemistry. The Bachelor of Arts program is suitable for students interested in secondary school teaching, premedical training, and interdisciplinary studies such as biophysics, environmental sciences, oceanography, and toxicology.

All students interested in a major are encouraged to begin research involvements during their first and sophomore years. The course offering "Research Techniques and Applications" (CHEM 1190) provides students with the opportunity to be engaged in the ongoing research programs of chemistry faculty, and a significant component of this experience will involve the use of sophisticated instrumentation for specific research applications. The junior-senior course "Independent Research in Chemistry and Biochemistry" (CHEM 3-90) then allows experienced students to undertake suitably challenging projects with faculty members without having to spend a large fraction of time in introductory formats.

BACHELOR OF ARTS DEGREE

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

I. The common curriculum

II. Departmental requirements:

A. 31-32 credits in chemistry including CHEM 1318, 1118, 2319, 2119, 2320, 2220, 3330, 2130, 3432, 3334, 3135, 3321, 3121, and one upper division course selected from CHEM 3335, 4242, 4346, or 4347.
B. MATH 1311, 1312, PHYS 1111, 1112, 1309, 1310.
C. Completion of the Senior Experience is satisfied by one of the following: CHEM 4346, 4347, GNED 4301 Senior Synthesis, or GNED 4300 Senior Interdisciplinary Seminar.

III. Electives sufficient to total 124 semester hours.

BACHELOR OF SCIENCE DEGREE IN CHEMISTRY

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

I. The common curriculum

II. Departmental requirements:

A. 43 credits in chemistry, including CHEM 1318, 1118, 2319, 2119, 2320, 2220, 3330, 2130, 3190, 3432, 3334, 3135, 3321, 3121, 3335, 4242, 4250 and two courses selected from 4340, 4346 and 4347. Students may substitute an advanced course in molecular biology, engineering science, or physics for one of the two advanced electives in chemistry. This substitution must be approved by the department chair.
B. MATH 1311, 1312, plus one additional course from MATH 2321 or 3336; PHYS 1111, 1112, 1309 or 1311, 1310 or 1312.
C. Completion of the Senior Experience is satisfied by one of the following: CHEM 4346, 4347, 4395, or 4399.

III. Electives sufficient to total 124 semester hours.

BACHELOR OF SCIENCE DEGREE IN BIOCHEMISTRY

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

I. The common curriculum

II. Departmental requirements:

A. 38 credits in chemistry, including CHEM 1318, 1118, 2319, 2119, 2130, 2320, 2220, 3121, 3321, 3330, 3131, 3135, 3334, 3432, 4340, 4242, and one course chosen from 3335, 4346 and 4347.
B. BIOL 1311, 1111, 1312, 1212, and one course from the following: 3421, 3424, 3444, or 3446.
C. CHEM 3190 or BIOL 3190.

D. PHYS 1111, 1112, 1309, 1310.
E. MATH 1311, 1312.
F. Completion of the Senior Experience is satisfied by one of the following: CHEM 4346, 4347, 4395, or 4399.

III. Electives sufficient to total 124 semester hours.

GUIDELINES FOR ACCEPTANCE OF MAJORS

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

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

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

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

THE MINOR

A minor in chemistry may be obtained by successful completion of a minimum of 20 hours in chemistry, to include CHEM 1318, 1118, 2319, 2119, 2320, 2220, 2130, and at least 6 additional hours in upper division courses.

HONORS IN CHEMISTRY

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

Application and Procedures

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

Requirements

The Honors Program in Chemistry requires a minimum of nine credit hours of research normally arranged over three semesters. At least six of these hours must be taken in the senior year and devoted to the thesis research. If a student has worked full-time on research related to the thesis for a minimum of ten weeks during one summer, the department may waive the requirement for three of the nine credit hours. Submission of the final research report for the summer is required for this waiver.

BACHELOR OF SCIENCE DEGREE IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

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

I. The common curriculum

II. Departmental requirements:

A. 47-49 credits in chemistry and biology, distributed as follows:
   i. Core Courses. BIOL 1311, 1111, 1312, 1212, 3421, 3444, CHEM 1318, 1118, 2319, 2119, 2320, 2220, 3330, 2130, 3131, 3334, and 4340.
   ii. Advanced Electives. Two courses chosen from the following list (one from each department): BIOL 3424, 3433, 3442, 3446, 3449, CHEM 3432, 4346, 4347, or the combination of 3321 and 3121.
   iii. Advanced Laboratory. One course chosen from the following list: BIOL 2191, 3-90, 3-92, CHEM 2180, or 3-90.
B. MATH 1307 or 1311 and 1308 or 1312.
C. PHYS 1111, 1112, 1309, 1310.
D. Completion of the Senior Experience is satisfied by one of the following: BIOL 4399, CHEM 4346, 4347, 4395, 4399, GNED 4300, or 4301.

III. Electives sufficient to total 124 semester hours.

GUIDELINES FOR ACCEPTANCE OF MAJORS

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

1. Completion of CHEM 1318, 1118, 2319, 2119, 2320, 2220 and BIOL 1311, 1111, 1312, 1212 with grades of C or better.
2. Completion of MATH 1307 or 1311 with a grade of C or better.
3. A grade point average of at least 2.0 on all other university work.

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

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

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. Laboratory, 3 hours per week.
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 chemical 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, electronic structure, chemical bonding, and intermolecular interactions with modern examples. An emphasis will be placed on problem solving involving mathematics. CHEM 1300 provides a thorough preparation for CHEM 1318. Lecture, 3 hours per week.

CHEM 1301 The Chemistry of Crime
The study of forensic chemistry, with an emphasis on the scientific basis for the various techniques used in solving crimes. The course is designed as a studio course that includes both lectures and laboratory experiments during the class period. The course will include 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 may register for CHEM 1301.

CHEM 1305 The Chemistry of Art
The study of the chemical foundations of the visual arts. 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. 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 may register for CHEM 1305.

CHEM 1318 General Chemistry
Fundamental concepts in chemical science, taught from perspectives of chemistry in the modern world, with emphasis placed on quantitative problem solving. Course content will include stoichiometry and mass relationships, properties of solutions, atomic structure, molecular structure and bonding, intermolecular forces, chemical equilibrium, thermodynamics and kinetics. Lecture, 3 hours per week. Credit for the Common Curriculum will not be granted for both CHEM 1300 and CHEM 1318.
Prerequisite: Passing the Chemistry Placement Exam or CHEM 1300.
Corequisite: 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 developmental of foundational laboratory techniques and skills, including attention to details and precision. Utilizing quantitative instrumental techniques, students build a deeper level of experimentation and problem solving skills while becoming increasingly independent. Laboratory, 3 hours per week.
Prerequisite: CHEM 2220.

CHEM 2180 Biomolecular Research Methods
Investigative skills for interdisciplinary research in the biological and chemical sciences. The use of modern fluorescence spectroscopy, microcalorimetry, and mass spectrometry to solve biomolecular research problems. Research topics will vary from year to year and may include protein studies, biomolecular stability, and biomolecular recognition. (Also listed as BIOL 2180.)
Prerequisites: BIOL 1312, 1212, CHEM 2319, 2119, and consent of instructor.

CHEM 2220 Chemical Synthesis Laboratory
Continued development of student laboratory experience with emphasis on organic and inorganic syntheses. Nuclear magnetic resonance spectroscopy, use of Chemical Abstracts, and technical writing are emphasized. Laboratory, 5 hours per week, alternate weeks; discussion session, 1 hour each week.
Pre- or Corequisite: CHEM 2320.
Prerequisite: CHEM 2119.

CHEM 2305 Chemistry for the Visual Artist
The study of the chemical foundations of the visual arts. Topics range from a study of the historical development of technical innovations and discoveries that impacted the evolution of art, to the chemical and physical properties of artists' materials, to an introduction to conservation, and the analysis of works of art. The course is designed to include both lectures and laboratory experiments during the class period. A minimum of one-half of the course meeting times will be laboratory activities. A field trip may be included. The laboratory activities will be expanded and built upon in the corequisite course, ART 2305. 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 may register for CHEM 2305. Students may register for one of CHEM 1305 or CHEM 2305.

Corequisite: ART 2305: Studio Art for Chemists.

CHEM 2319 Organic Chemistry I
Introduction to the basic principles of organic chemistry through studies of the structures, properties, and reactions of carbon-based compounds. Lecture, 3 hours per week.
Corequisite: CHEM 2119.
Prerequisite: CHEM 1318.

CHEM 2320 Organic Chemistry II
The continuation of CHEM 2319 with emphasis on structure-activity relationships, mechanisms, and synthesis of complex organic compounds. Lecture, 3 hours per week.
Prerequisite: CHEM 2319.

CHEM 2340 Application of Chemical Principles
Application of chemical structure, thermodynamics, and kinetics to a broad range of problems, including acid-based reactions, redox reactions, and energy production. Lecture, 3 hours per week.
Prerequisite: CHEM 2319.

CHEM 3121 Inorganic Chemistry Laboratory
Synthesis, spectroscopic 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 their 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, 2130.

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.
Prerequisite: 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, nucleic acid, carbohydrate and lipid structure, mechanisms of enzymes, membrane structure and dynamics, and bioenergetics. 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.
Prerequisites: CHEM 1318, MATH 1312.

CHEM 3335 Physical Chemistry II
A continuation of CHEM 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.
Prerequisite: CHEM 3334.

CHEM 3-90 Independent Research in Chemistry and Biochemistry
Analyses directed to the solution of a problem having mutual student and faculty interest. All available instrumental and technical resources appropriate to this research are employed. Oral and written communication of results is 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 Readings
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 4194 Major's Seminar
A seminar course for junior and senior chemistry majors. Attendance at weekly departmental seminars is required. In addition, each student will prepare an abstract and give an oral presentation on a current topic in chemical science. May be repeated for up to four hours credit. Pass/Fail.

CHEM 4242 Advanced Analytical Methods
Principles of modern instrumental analysis, with emphasis on separation methods and mass spectrometry. Both theory and practical experience are addressed. Appropriate laboratory experience emphasizes use of sophisticated chemical instrumentation. Equivalent of 1 lecture hour and 3 laboratory hours per week.
Prerequisites: CHEM 3334, 3432.

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.
Prerequisites: CHEM 3334, 3335, 3135, 4242.

CHEM 4340 Biochemistry II
The continuation of CHEM 3330 with emphasis on metabolism, biosynthesis, and gene expression. Lecture, 3 hours per week.
Prerequisite: 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, bioanalytical, organometallic chemistry, or the chemistry of materials. Lecture, 3 hours per week. This course fulfills the Senior Experience requirement of the University's Common Curriculum for the BA and BS Chemistry, Biochemistry, and Biochemistry and Molecular Biology degrees.
Pre- or corequisite: CHEM 3334.

CHEM 4347 Advanced Interdisciplinary Topics - Spring
Advanced topics in chemistry, with an emphasis on modern approaches in interdisciplinary areas. Topics will vary from semester to semester and may include physical inorganic, physical organic, bioinorganic, bioorganic, bioanalytical, organometallic chemistry, or the chemistry of materials. Lecture, 3 hours per week, Spring. This course fulfills the Senior Experience requirement of the University's Common Curriculum for the BA and BS Chemistry, Biochemistry, and Biochemistry and Molecular Biology degrees.
Prerequisite: CHEM 3334.

CHEM 4395 Thesis Research in Chemistry and Biochemistry
Written communication of research performed at Trinity University in thesis form. Course enrollment requires a minimum of two semesters of research involvement in a research project and the permission of the department chair. This course fulfills the Senior Experience requirement of the University's Common Curriculum for the BS Chemistry, Biochemistry, and Biochemistry and Molecular Biology degrees.

CHEM 4399 Honors Thesis
Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. To be taken only by Senior Honors students in both terms of their Senior year. Includes participation in Senior Colloquium where students present reports on their Thesis work. This course fulfills the Senior Experience requirement of the University's Common Curriculum for the BS Chemistry, Biochemistry, and Biochemistry and Molecular Biology degrees.

CLASSICAL STUDIES

ERWIN F. COOK, Ph.D., T. Frank Murchison Distinguished Professor of Classical Studies
MARK B. GARRISON, Ph.D., Alice P. Brown Professor of Art and Art History
NICOLLE E. HIRSCHFELD, Ph.D., Assistant Professor
THOMAS E. JENKINS, Ph.D., Associate Professor; Chair
TIMOTHY M. O'SULLIVAN, Ph.D., Associate Professor
CORINNE O. PACHE, Ph.D., Assistant Professor

THE MAJOR

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, speech and drama, 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 History, History, Philosophy, Political Science, Religion, Sociology and Anthropology, and Speech and Drama form part of the program of the Department of Classical Studies. The program offers an excellent focus for a liberal arts education and combines well with majors in other fields in both the humanities and sciences.

Students interested in graduate work in Classical Studies or related fields should be advised early on that a knowledge of both languages is essential for work in a good graduate school. The requirements for the major are only a minimum, and students preparing for graduate study should start language courses as soon as possible. Note that courses credited towards the major in one field (Ancient Mediterranean Studies, Greek, Latin, and Classical Languages) may also be credited toward a minor in another but may not be credited towards a second major in the Department.

ANCIENT MEDITERRANEAN STUDIES

Requirements for a Bachelor of Arts with a major in Ancient Mediterranean Studies are as follows:

I. The common curriculum

II. Departmental requirements: 30 hours of courses chosen from those listed below under Classics Courses in English, Greek, or Latin, including 18 upper division hours. At least 12 hours must be CLAS hours. This major does not require a language, although language courses do count for this degree. Greek and Latin courses credited towards the Ancient Mediterranean Studies major may also be credited towards the minor in Greek or Latin.

III. Completion of the Senior Experience: GNED 4300 Senior Interdisciplinary Seminar; or GNED 4301 Senior Synthesis; or CLAS 4398, 4399 Honors Thesis; or any upper division course offered by a faculty member in the Classical Studies Department, with the addition of a senior experience paper or project for the course (requires permission of the instructor and simultaneous enrollment in CLAS 4001, a no-credit, pass/fail course); or completion of CLAS 4302 Advanced Seminar in Classical Studies; or, for those pursuing multiple majors, another Capstone Course or Senior Thesis they complete for another major.

IV. Electives sufficient to total 124 hours.

GREEK

Requirements for a Bachelor of Arts with a major in Greek are as follows:

I. The common curriculum

II. Departmental requirements:

A. Completion of the elementary and intermediate sequence of courses (12 hours) or the equivalent in Greek.
B. 27 additional hours of courses chosen from those listed below under Classics Courses in English, Greek, or Latin, including 12 upper division hours of Greek. (Courses in Latin credited towards the Greek major may also be credited towards the minor in Latin.)
C. Completion of the Senior Experience: GNED 4300 Senior Interdisciplinary Seminar; or GNED 4301 Senior Synthesis; or CLAS 4398, 4399 Honors Thesis; or any upper division course offered by a faculty member in the Classical Studies Department, with the addition of a senior experience paper or project for the course (requires permission of the instructor and simultaneous enrollment in CLAS 4001, a no-credit, pass/fail course); or completion of CLAS 4302 Advanced Seminar in Classical Studies; or, for those pursuing multiple majors, another Capstone Course or Senior Thesis they complete for another major.

III. Electives sufficient to total 124 hours.

LATIN

Requirements for a Bachelor of Arts with a major in Latin are as follows:

I. The common curriculum

II. Departmental requirements:

A. Completion of the elementary and intermediate sequence of courses (14 hours) or the equivalent in Latin.
B. 25 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.)

C. Completion of the Senior Experience: GNED 4300 Senior Interdisciplinary Seminar; or GNED 4301 Senior Synthesis; or CLAS 4398, 4399 Honors Thesis; or any upper division course offered by a faculty member in the Classical Studies Department, with the addition of a senior experience paper or project for the course (requires permission of the instructor and simultaneous enrollment in CLAS 4001, a no-credit, pass/fail course); or completion of CLAS 4302 Advanced Seminar in Classical Studies; or, for those pursuing multiple majors, another Capstone Course or Senior Thesis they complete for another major.

III. Electives sufficient to total 124 hours.

CLASSICAL LANGUAGES

Requirements for a Bachelor of Arts with a major in Classical Languages are as follows:

I. The common curriculum

II. Departmental requirements:

A. Completion of the elementary and intermediate sequence of courses (26 hours) or the equivalent in both Greek and Latin.

B. 22 hours of courses chosen from those listed below under Classics Courses in English, Greek, or Latin, including 15 upper division hours of either Greek or Latin, with at least 6 hours of each.

C. Completion of the Senior Experience: GNED 4300 Senior Interdisciplinary Seminar; or GNED 4301 Senior Synthesis; or CLAS 4398, 4399 Honors Thesis; or any upper division course offered by a faculty member in the Classical Studies Department, with the addition of a senior experience paper or project for the course (requires permission of the instructor and simultaneous enrollment in CLAS 4001, a no-credit, pass/fail course); or completion of CLAS 4302 Advanced Seminar in Classical Studies; or, for those pursuing multiple majors, another Capstone Course or Senior Thesis they complete for another major.

III. Electives sufficient to total 124 hours.

THE MINOR

Classical Studies at Trinity is highly interdisciplinary in nature, bringing together the fields of history, literature, religion, philosophy, speech and drama, art history, archaeology, anthropology, political science, and so forth. The Department of Classical Studies offers three minors: Ancient Mediterranean Studies, Greek, and Latin. Ancient Mediterranean Studies is a minor in ancient culture and does not require a language, although language courses do count toward this degree. In addition to the University's regulations for minors, students should complete the following Departmental requirements.

ANCIENT MEDITERRANEAN STUDIES

Completion of at least 18 hours of courses chosen from those listed below under Classics Courses in English, Greek, or Latin, of which at least 9 hours must be in the upper division. At least 6 hours must be CLAS hours. Ancient Mediterranean Studies is a minor in ancient culture and does not require a language, although language courses do count toward this degree. No more than 3 hours may overlap with the student's major. A minimum of 12 hours toward the minor must be completed at Trinity.

GREEK

Completion of at least 18 hours in Greek, of which at least 6 must be in the upper division. A minimum of 12 hours toward the minor must be completed at Trinity.

LATIN

Completion of at least 18 hours in Latin, of which at least 6 must be in the upper division. A minimum of 12 hours toward the minor must be completed at Trinity.

THE HONORS PROGRAM

I. University requirements

II. Departmental requirements:

The Department of Classical Studies offers an Honors Program in Classics. The requirements for Honors in Classical Studies are the same as the University requirements. For further information, please consult the chair of the department as early as possible in the first semester of the junior year.

LANGUAGE SKILLS

All courses under the heading Classics Courses in English are taught through the medium of English translation and no knowledge of Greek or Latin is required. Courses under the headings Greek and Latin are directed to the acquisition of those languages, respectively.

CLASSICS COURSES IN ENGLISH

LOWER DIVISION

CLAS 1301 Topics in Classical Studies
Study of topics related to the ancient Mediterranean world and its legacy, such as Latin and Greek elements in the English language, classical civilization, etc. May be taken more than once, provided that topics vary.

CLAS 1302 Literary Classics of the Ancient Greek World
A study of certain major works of ancient Greek literature in their entirety, and a survey of the major Greek authors and of their contribution to European literature. All works will be read in English translation.

CLAS 1303 Literary Classics of the Roman World
A study of certain major works of Latin literature in their entirety, and a survey of the major Latin authors and of their contribution to European literature. All works will be read in English translation.

CLAS 1304 Introduction to Classical Archaeology
An introduction to the history of archaeological activity in the Mediterranean, and archaeological theory and field techniques. Course will also examine major sites and monuments of ancient Greece and Rome. (Also listed as ANTH 1304.)

CLAS 1305 Classical Mythology
An introductory survey of the major myths of the classical world, drawing on evidence from ancient literature and art. Course may also explore modern theoretical approaches (anthropological, historical, political, linguistic, feminist, psychological, etc.) to the study of myth in general, and how these modern theories have been applied to classical myth.

CLAS 1306 Ancient Science and Technology
An examination of the attitude to science and technology in the ancient world and how this differed from today. Study of the scientific and technological achievements of the ancient world, major works of engineering, and major writings on scientific or technological subjects.

CLAS 1307 Gender and Identity in the Ancient World
An examination of the roles of women and men in the society, religion, and culture of the ancient world. Readings will include historical, religious, medical, legal, philosophical, and literary texts. Representations of men and women in the visual arts will also be considered. (Also listed as HIST 1311.)

CLAS 1308 Daily Life in Ancient Rome
An introduction to the Roman world by way of the daily life of its inhabitants, with a focus on the urban experience. Evidence will include literary texts, inscriptions, epitaphs, graffiti, painting, sculpture, wills, letters, and the art and architecture of domestic space.

CLAS 1309 Pirates, Merchants, and Marines: Seafaring in the Ancient Mediterranean
This course explores how human relations with the sea affected the social, economic, military, political, and technological aspects of life in the ancient Mediterranean littoral. Evidence includes hulls and cargoes of shipwrecks, harborworks, inscriptions, graffiti, wall 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 ANTH 1309.)

CLAS 1312 Greeks, Romans, and Barbarians
This course gives students an opportunity to examine the cultures and achievements of peoples labeled “barbarians” by the ancient Greeks and Romans. Students will use a broad selection of historical documents originating from the Near East, Egypt, Greece, and Rome, as well as the results of archaeological research, for investigating the social structures and values of these cultures. Critical methods for interpreting ancient and modern evidence about these societies will also be discussed. (Also listed as HIST 1312.)

ANTH 1304 Introduction to Classical Archaeology
(For description, see under Sociology and Anthropology.)

ANTH 1309 Pirates, Merchants, and Marines: Seafaring in the Ancient Mediterranean
(For description, see under Sociology and Anthropology.)

ANTH 2312 The Anthropology of Ancient Israel
(For description, see under Sociology and Anthropology.) (Also listed as RELI 1351.)

ARTH 1307 Art History I: Prehistoric through Medieval Art
(For description, see under Art History.)

ARTH 1313 Art and Archaeology of Ancient Egypt
(For description, see under Art History.)

HIST 1310 Ancient Greece and Rome
(For description, see under History.)

HIST 1311 Gender and Identity in the Ancient World
(For description, see under History.)

HIST 1312 Greeks, Romans, and Barbarians
(For description, see under History.)

RELI 1351 The Anthropology of Ancient Israel
(For description, see under Sociology and Anthropology.) (Also listed as ANTH 2312.)

SPCH 2350 Classical Rhetorical Theory
(For description, see under Speech and Drama.)

UPPER DIVISION

CLAS 3301 Advanced Topics in Classical Studies
Advanced study of topics related to the ancient Mediterranean world and its legacy, such as Neronian culture, ancient scripts, Hellenistic

and Greek Imperial literature, the Byzantine world. May be taken more than once, provided that topics vary.
Prerequisite: Sophomore standing or consent of instructor.

CLAS 3302 Greek and Roman Epic
A study of such epics as Homer's Iliad and Odyssey and Virgil's Aeneid, read in English, with attention to changes in concepts of heroism and the self. Discussions will also focus on how the epics reflect cultural and political life.
Prerequisite: Sophomore standing or consent of instructor.

CLAS 3303 Greek and Roman Drama
A study of Greek and Roman tragedies and comedies, read in English, with attention to how the plays reflect contemporary (and enduring) social, theatrical, and political concerns. (Also listed as DRAM 3335 and ENGL 3322.)
Prerequisite: Sophomore standing or consent of instructor.

CLAS 3304 The Ancient Romance and Novel
A study of ancient prose fiction, which focuses largely on love and adventure. Discussions emphasize social, religious, and aesthetic issues raised by individual works, and special attention is paid to the ancient romance's relation to the medieval romance and the modern novel.
Prerequisite: Sophomore standing or consent of instructor.

CLAS 3305 Antiquity and Modernity
Antiquity and Modernity explores the ways in which the ancient world is constructed through the lenses of modern literature, art, and scholarship, focusing especially on the period between the two world wars. Topics to be covered include the influence of Greek texts on modern constructions of sexuality (Freud, Foucault, Plato, *The Greek Anthology*); the links between the avant-garde of both the ancient and modern worlds (Propertius and Pound); the old and new Romes (Augustus and Mussolini); and the dramatic manipulation of myth (Sophocles and Stravinsky's *Oedipus Rex*). Other works include Thornton Wilder's *The Ides of March*, Lucian's *Dialogues of the Courtesans*, and Ronald Syme's *The Roman Revolution*. All readings are in English translation.
Prerequisite: Sophomore standing or consent of instructor.

CLAS 3306 Ancient Cyprus
A survey of the material, political and cultural histories of Cyprus, from the arrival of the first human inhabitants (10th millennium BCE) through the rule of the Roman emperors (4th century CE), with a special emphasis on themes of diversity, assimilation and identity. The early history of the island will be considered primarily through the archaeological discoveries, which, prior to the availability of written records, are our only source of information. The later history will draw on other sources, such as historical and literary texts, inscriptions, sculpture, mosaics, and monuments.
Prerequisite: Sophomore standing or consent of instructor.

CLAS 3338 Greek Religious Experience
A study of Greek religious festivals designed to produce a coherent image of a year in the religious life of the ancient Greeks. Through a combination of archaeological and literary evidence, we will attempt to reconstruct the rituals performed at the various festivals and explore the ways in which they organized and articulated the community through shared religious experience. We shall also consider the ways in which religion organized civic space and gave it meaning. (Also listed as RELI 3338.)
Prerequisite: Sophomore standing or consent of instructor.

CLAS 3350 Theorizing Myth
A survey of theoretical approaches to myth from the eighteenth century to the present. The survey begins with the transition from renaissance belief that myth is a form of moral instruction conveyed by allegory to the romantic belief that myth is a symbolic mode of discourse offering insight into transcendental reality. We will then chart the evolution of this approach, beginning with its inspiration in Kantian metaphysics and early formulations by German romantics such as Schiller and proceeding on to Freud and Ricoeur. A second strand begins with Hegel's theories of "false consciousness" that would in time develop into interpretations of myth as ideology, under the influence of Marx, Adorno and Althusser. A final strand begins with the earlier folklorists, the brothers Grimm, and would in time develop into functionalist approaches to myth by anthropologists such as Malinowski, Boas and Lévi-Strauss. The resulting big picture is as much an intellectual history of modernity as a history of theorizing myth.
Prerequisite: Sophomore standing or consent of instructor.

CLAS 3371 Introduction to Romance Linguistics
A study of the science of language as it applies to those tongues having their origin in spoken Latin, principally French, Italian, Portuguese, Rumanian, and Spanish. Attention will be given both to historical developments and to the current situations of such languages. (Also listed as FREN 3371, ITAL 3371, LING 3371, and SPAN 3371.)
Prerequisite: Two years or the equivalent of Latin, Ancient Greek, or a Romance language.

CLAS 3-72 Archaeological Practicum
Participation in an approved excavation in the Mediterranean world, Western Europe, or the Near East. Students will be expected to receive instruction in excavation techniques and in the recording and study of the site and the material. Two weeks' work will normally be counted as equivalent to 1 credit, up to a maximum of 3 credits.
Prerequisites: Approval of the department chair and of the excavation director.

CLAS 3-90 Directed Studies
Individual work under supervisor in areas not covered by other courses. May be taken more than once, as content varies.
Prerequisite: Consent of the department chair.

CLAS 3398 Honors Readings
Independent study in selected areas in preparation for Honors Thesis.
Prerequisite: Admission to Honors Program.

CLAS 4001 Senior Experience
Enrollment in this course is required in conjunction with the upper-division Classics course for which a senior wishes credit for the senior experience. This course carries no credit by itself and is pass/fail.

CLAS 4302 Advanced Seminar in Classical Studies
A seminar on selected special topics in Classical Studies. This course fulfills the Senior Experience requirement of the University's

Common Curriculum. 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.)
Prerequisites: CLAS 3-72 and approval of the department chair 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 4-97 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 4398, 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.

ANTH 4-72 Archaeology Practicum
(For description, see under Sociology and Anthropology.)

ARTH 3320 The Minoan-Mycenaean Civilization
(For description, see under Art History.)

ARTH 3321 Greek Vase Painting
(For description, see under Art History.)

ARTH 3322 Greek Architecture
(For description, see under Art History.)

ARTH 3325 Roman Art and Architecture
(For description, see under Art History.)

ARTH 3328 Art and Archaeology of Mesopotamia and Persia
(For description, see under Art History.)

ARTH 3330 Art and Architecture in the Late Classical World
(For description, see under Art History.)

ARTH 3391 Topics in Art History (where appropriate)
(For description, see under Art History.)

ARTH 4395 Seminar in Art History (where appropriate)
(For description, see under Art History.)

DRAM 3335 Studies in Classical Drama
(For description, see under Speech and Drama.)

ENGL 3322 Studies in Classical Drama: Greek and Roman Drama
(For description, see under English.)

FREN 3371 Introduction to Romance Linguistics
(For description, see under Modern Languages and Literatures.)

HIST 3310 Archaic and Classical Greece
(For description, see under History.)

HIST 3314 The Mediterranean World in the Hellenistic Age
(For description, see under History.)

HIST 3318 The Roman Empire
(For description, see under History.)

HIST 3-92 Special Topics in History (when topics pertain to the ancient world)
(For description, see under History.)

ITAL 3371 Introduction to Romance Linguistics
(For description, see under Modern Languages and Literatures.)

LING 3371 **Introduction to Romance Linguistics**
(For description, see under Linguistics.)

PHIL 3320 **Classical Greek Philosophy**
(For description, see under Philosophy.)

PHIL 3321 **Hellenistic Philosophy**
(For description, see under Philosophy.)

PHIL 4381 **Seminar on Plato**
(For description, see under Philosophy.)

PHIL 4382 **Seminar on Aristotle**
(For description, see under Philosophy.)

PLSI 3361 **Classical Political Thought**
(For description, see under Political Science.)

RELI 3338 **Greek Religious Experience**
(For description, see under Religion.)

RELI 3353 **The Gospels, Jesus, and Christian Origins**
(For description, see under Religion.)

RELI 3354 **The Letters of Paul**
(For description, see under Religion.)

RELI 3355 **Non-Canonical Early Christian Literature**
(For description, see under Religion.)

SPAN 3371 **Introduction to Romance Linguistics**
(For description, see under Modern Languages and Literatures.)

XXXX 3-90 **Directed Studies**
Directed Studies courses in any of the above areas when dealing with the ancient world are also acceptable.
Prerequisite: Consent of the chair of Classical Studies if counting toward major or minor in Classical Studies.

XXXX 4-90 **Directed Studies**
Directed Studies courses in any of the above areas when dealing with the ancient world are also acceptable.
Prerequisite: Consent of the chair of Classical Studies if counting toward major or minor in Classical Studies.

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 2302 **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.

UPPER DIVISION

GREK 3301 **Homer and Greek Epic**
Selections from the Iliad and Odyssey. May also include other epic poets.
Prerequisite: GREK 2302, 2303, or the equivalent.

GREK 3302 **Attic Prose**
Readings in Attic prose writers, especially Plato, Xenophon, and the orators.
Prerequisite: GREK 2302, 2303, or the equivalent.

GREK 3303 **Greek Drama**
Readings from Greek drama.
Prerequisite: GREK 2302, 2303, or the equivalent.

GREK 3304 Greek Historians
Readings in Greek historians, especially Herodotus and Thucydides.
Prerequisite: GREK 2302, 2303, or the equivalent.

GREK 3-90 Directed Studies
Individual work under supervisor in areas not covered by other courses. May be taken more than once, as content varies.
Prerequisites: GREK 2302, 2303, or the equivalent, and consent of the department chair.

GREK 4-90 Directed Studies
Individual work under supervisor in areas not covered by other courses. May be taken more than once, as content varies.
Prerequisites: GREK 2302, 2303, or the equivalent, and consent of the department chair.

GREK 4-91 Selected Topics
Special study in fields not covered by other courses. Variations in credit according to work performed, from 1-6 hours. May be taken more than once, as content varies.
Prerequisites: GREK 2302, 2303, or the equivalent, and consent of the department chair.

LATIN

LOWER DIVISION

LATN 1401 Elementary Latin I
4 class hours a week for 1 semester. Fall.

LATN 1402 Elementary Latin II
4 class hours a week for 1 semester. Spring.
Prerequisite: LATN 1401 or the equivalent.

LATN 2301 Intermediate Latin I
3 class hours a week for 1 semester. Fall.
Prerequisite: LATN 1402 or the equivalent.

LATN 2302 Intermediate Latin II
Selections from Latin authors; emphasis on developing reading skills. Spring.
Prerequisite: LATN 2301 or the equivalent.

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 3302 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 3303 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 3304 Lyric and 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 3305 Latin Prose from 43 B.C.
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 3306 Comedy and 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 3-90 Directed Studies
Individual work under supervisor in areas not covered by other courses. May be taken more than once, as content varies.
Prerequisites: LATN 2302 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.

COGNITIVE SCIENCE

FACULTY ADVISORY COMMITTEE:

CURTIS BROWN, Ph.D., Professor, Philosophy; Chair
PAULA T. HERTEL, Ph.D., Professor, Psychology
JANE B. CHILDERS, Ph.D., Associate Professor, Psychology
J. PAUL MYERS, JR., Ph.D., Professor, Computer Science
YU ZHANG, Ph.D., Assistant Professor, Computer Science

The minor in Cognitive Science gives students the opportunity to study the nature of cognition from the point of view of several related disciplines. Psychology, philosophy, and computer science share a common interest in the nature of knowledge, the means by which it is stored, acquired, and retrieved, the commonalities shared by biological and electronic information processing entities, and the ways knowledge is used in thinking and problem solving. The minor allows students to bring the theories and methods of these various disciplines to bear on a common set of problems. The minor requires 18 hours, with 12 additional hours of prerequisites in Computer Science.

I. Core Courses (9 hours):

CSCI 3344 Artificial Intelligence
PHIL 3331 Philosophy of Mind
PSYC 2330 Fundamentals of Cognition

II. Elective Courses (9 hours):

At least two courses must be chosen from the following:

PSYC 3311 Sensation and Perception
PSYC 3331 Memory and Cognition
PSYC 3333 Simulation of Neural and Cognitive Processes

The remaining course, if any, may be chosen from the following:

CSCI 3-90 Directed Study*
CSCI 3291 Current Topics in Computer Science*
NEUR 2310 Introduction to Neuroscience
PHIL 3-90 Directed Studies*
PSYC 3-61 Reading and Research*
PSYC 3321 Cognitive Development
PSYC 3368 Supervised Research*

* with approval of the topic by the Chair of the Cognitive Science Committee

III. Computer Science Courses Required as Prerequisites:

CSCI 1320 Principles of Algorithm Design I
CSCI 1321 Principles of Algorithm Design II
CSCI 1323 Discrete Structures
CSCI 2320 Principles of Data Abstraction (may be waived by permission of CSCI 3344 instructor)

COMMUNICATION

WILLIAM G. CHRIST, Ph.D., Professor; Chair
AARON DELWICHE, Ph.D., Associate Professor
JENNIFER J. HENDERSON, Ph.D., Associate Professor
ROBERT HUESCA, Ph.D., Professor
AMBER HUTCHINS, Ph.D., Assistant Professor
SAMMYE L. JOHNSON, M.S.J., Carlos Augustus de Lozano Professor of Journalism
PATRICK KEATING, Ph.D., Assistant Professor
LOU RUTIGLIANO, Ph.D., Assistant Professor

THE MAJOR

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

I. The common curriculum

II. Departmental requirements:

A. To be accepted as a major in Communication, a student must have successfully completed COMM 1301 (Mass Media) and 2302 (Media Interpretation and Criticism).
B. Thirty (30) hours (of which at least 15 must be upper division) of course work in the Department of Communication including:
1. Nine (9) semester hours in core courses (COMM 1301, 2302, 3303).
2. Nine (9) semester hours consisting of one course from each of the following three areas of study. These courses will be chosen in consultation with faculty advisor.
a. Three (3) semester hours in media studies (COMM 2320, 3321, 3322, 3325, 3326, 3328, 3-98, 4-90, 4398, 4399)
b. Three (3) semester hours in media messages (COMM 3340, 3341, 3342, 3343, 3344, 3-45, 4350)
c. Three (3) semester hours in media management (COMM 3360, 3361, 3362, 3363, 3364)
3. Nine (9) semester hours in electives in the Department of Communication.
4. Three (3) semester hours in completion of the Senior Experience requirement (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 advisor.
D. Courses in the Department of Communication exceeding 36 hours must be over and above the 124 hours required for graduation.

III. Elective hours outside the Department of Communication sufficient to total 124 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 (21) semester hours to include COMM 1301, 2302, 3303, and four (4) three-hour elective courses; at least nine (9) semester hours of the total 21 semester hours required must be upper division.

CLASSES

CORE

COMM 1301	Mass Media
COMM 2302	Media Interpretation and Criticism
COMM 3303	Media Audiences

CAPSTONE

COMM 4395	Communication Capstone Seminar

MEDIA STUDIES

COMM 1302	Introduction to Film Studies
COMM 2320	Media, Advertising, and Society
COMM 3120	La Telenovela en América Latina
COMM 3321	Arts Criticism
COMM 3322	International Communication
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 3340	Media Writing
COMM 3341	Audio Communication
COMM 3342	Visual Communication
COMM 3343	Print Communication

COMM 3344 Interactive Multimedia Communication
COMM 3-45 Media Communication Workshop
COMM 4350 Advanced Producing

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 1094 Internship Experience
COMM 1110, 1120, 1121, 1122, 1130, 1131, 1140, 1150, 1160, 1170
Apprenticeship in Communication Center Media
COMM 3300 Media Management Practicum and Study

COURSES

LOWER DIVISION

COMM 1094 Internship Experience
Encourages formal, off-campus media work experience. Consent of department chair required.

COMM 1110, 1120, 1121, 1122, 1130, 1131, 1140, 1150, 1160, 1170
Apprenticeship in Communication Center Media
Positions for students in one of the student-managed media organizations that provides 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. (1110) Publication Production, (1120) KRTU Radio Host/Trainee, (1121) KRTU News, (1122) KRTU Sports, (1130) Digital Editing, (1131) TigerTV Production, (1140) Webpage Production, (1150) Public Relations, (1160) Underwriting and Development, and (1170) Media Management. Pass/Fail. Apprenticeship may be repeated up to 3 hours.

COMM 1301 Mass Media
Study of the communication process and critical analysis of the structural relationships within mass media industries.

COMM 1302 Introduction to Film Studies
This course is an introduction to the artistic, cultural, and scholarly importance of film. The course focuses on the development of film as a complex art form, the evolution of narrative as part of a formal system, the development of the industry and film genres, critical and cultural approaches to film analysis, and the construction of the audience. Students will read excerpts from primary texts as well as more general texts dealing with film interpretation and criticism. (Also listed as ARTH 1301, ENGL 1301, FILM 1301, and ML&L 1301.)

COMM 2301 International Cinema
This course focuses on the cultural and critical analysis of international films as an expression of particular artistic genres and/or styles within specific historical, ideological, and cultural contexts. Films selected have achieved wide, critical acclaim; others reveal unique and important visions of human experience; while still others are selected for their political, ideological, or sociological significance. Students should develop an awareness that the medium of film has a history and that its history is not confined to national boundaries. (Also listed as ARTH 2301, FILM 2301, ENGL 2300, and ML&L 2301.)

COMM 2302 Media Interpretation and Criticism
A critical study of the aesthetics, interpretation, and criticism of media messages.

COMM 2320 Media, Advertising, and Society
Studies the impact of advertising on individuals, culture, and society.

UPPER DIVISION

COMM 3120 La Telenovela en América Latina
An examination of the Latin American telenovela, or soap opera, from the perspectives of development communication, popular culture, and international television. This course will be conducted entirely in Spanish. (Also listed as INTL 3107.)
Prerequisite: SPAN 2302, the equivalent, or consent of instructor.

COMM 3300 Media Management Practicum and Study
Integration of work experience and study of management in information companies. Specific study areas include personnel, organization, programming and content policies, ethics and professional responsibilities, regulation, finance, sales, promotion, audiences, and administrative problems in newspapers, magazines, radio, television, cable, web publishing, and public relations and advertising companies. Includes a major project or case study related to management practices. Students are selected from management positions in media organizations including KRTU-FM, Publication Production, TigerTV, and Multimedia Production.
Prerequisites: Junior status, recommendation of departmental faculty, and approval of instructor.

COMM 3303 Media Audiences
A study of audiences, how they use and are affected by media.
Prerequisites: COMM 1301 and 2302; or consent of instructor.

COMM 3321 Arts Criticism
Integration and understanding of the role of the artist, the audience, and the critic in relation to the arts.

COMM 3322 International Communication
Studies communication as an essential component of international organizations and relations. Surveys major topics in international communication and international decision-making, comparative media systems and national philosophies, and Third World issues and policy development.
Prerequisite: COMM 1301 or permission of instructor. (Also listed as SPCH 3374.)

COMM 3325 Special Topics in Communication Media
Study and analysis of contemporary communication media topics offered at the initiative of 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.
Prerequisite: 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 3340 Media Writing
Understanding and using the written word through conceptualizing, gathering information, researching, writing, and editing a variety of material. Classes may stress one or more genres, formats, or themes. Past topics have covered magazine writing, news writing, broadcast writing, public relations writing, public affairs reporting, Internet journalism, and cultural affairs reporting. May be repeated when topics vary.
Prerequisite: COMM 2302 or consent of instructor.

COMM 3341 Audio Communication
Understanding and using audio through conceptualizing, gathering information, writing, editing, and producing aural communication. Classes may stress one or more genres, formats, or themes. Past topics have addressed community radio and alternative communication. May be repeated when topics vary.
Prerequisite: COMM 2302 or consent of instructor.

COMM 3342 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.
Prerequisite: COMM 2302 or consent of instructor.

COMM 3343 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.
Prerequisite: COMM 2302 or consent of instructor.

COMM 3344 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.
Prerequisite: COMM 2302 or consent of instructor.

COMM 3-45 Media Communication Workshop
Media communication production and procedures, to be offered at initiative of the faculty and announced during preregistration. Course may be repeated with departmental approval. 1-6 semester hours.
Prerequisite: COMM 2302 or consent of instructor.

COMM 3360 Principles of Public Relations
Covers both principles and techniques of public relations from the management and social science viewpoint of managing ideas, publics, and 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 free expression 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 the Internet.
Prerequisite: COMM 1301.

COMM 3364 Ethics and the Mass Media
A study of the ethical decisions, beyond mere legal restrictions, that media practitioners must face in the range of material they present to the public. Survey of literature and case studies.
Prerequisite: COMM 1301.

COMM 3-98 Honors Readings
Independent study in selected areas in preparation for Honors Thesis. May be taken for up to three hours of credit.
Prerequisite: Admission to the departmental Honors Program.

COMM 4350 Advanced Producing
Special production activities in selected media areas. Past topics have covered the convergence of media distribution systems and print and video literacy. May be repeated when topics vary.
Prerequisites: Any COMM 11-- course and any COMM 334- course.

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 builds on students' internship or work interests; (3) A significant creative project. In all options, a major component of the capstone course is research and analysis. This course fulfills the Senior Experience requirement of the University's Common Curriculum.
Prerequisites: Senior or rising senior standing and COMM 1301, 2302, and 3303.

COMM 4398, 4399 Honors Thesis
Individual research and scholarly investigation under faculty supervision leading to the preparation of an honors thesis. To be taken only by senior honors students in both terms of their senior year. Includes participation in senior colloquium where students present reports on their thesis work.

COMMUNICATION MANAGEMENT

FACULTY ADVISORY COMMITTEE:

JENNIFER J. HENDERSON, Ph.D., Associate Professor, Communication; Chair
J. CHARLENE DAVIS, Ph.D., Associate Professor, Business Administration
JOHN M. McGRATH, Ph.D., Associate Professor, Speech and Drama

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, speech communication, marketing, and business principles. Students interested in declaring a Communication Management minor should contact Professor Henderson; each student will then be assigned to a minor advisor.

THE MINOR

The requirements for a minor in Communication Management are:
21 semester hours consisting of 12 hours in required courses and 9 hours in elective courses.

Required Courses: 12 hours

COMM 3362	Media Law and Policy
MGMT 2301	Management of Organizations
MKTG 2301	Principles of Marketing
SPCH 3334	Persuasion

Elective Courses: 9 hours

COMM 3360	Principles of Public Relations
COMM 3361	Principles of Advertising
COMM 3364	Ethics and the Mass Media
MGMT 3371	Human Resources Management
MGMT 3372	Organizational Behavior
MKTG 3381	Consumer Behavior
MKTG 3382	Promotion Management
MKTG 4381	Marketing Management
SPCH 3362/ BUSN 3311	Organizational Communication (cross-listed course)
*SPCH 4397	Speech Communication Internship

* As approved by minor advisor.

COMPARATIVE LITERATURE

FACULTY ADVISORY COMMITTEE:

STEPHEN L. FIELD, Ph.D., Professor, Modern Languages and Literatures
THOMAS JENKINS, Ph.D., Associate Professor, Classical Studies
RUQAYYA Y. KHAN, Ph.D., Associate Professor, Religion
TIMOTHY M. O'SULLIVAN, Ph.D., Associate Professor, Classical Studies
MICHAEL SOTO, Ph.D., Associate Professor, English
HEATHER I. SULLIVAN, Ph.D., Associate Professor, Modern Languages and Literatures; Chair
RITA E. URQUIJO-RUIZ, Ph.D., Assistant Professor, Modern Languages and Literatures
MICHAEL T. WARD, Ph.D., Associate Professor, Modern Languages and Literatures

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 advisor 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.

THE MINOR

The requirements for a minor in Comparative Literature are as follows:

I. Introduction to Comparative Literature (CMLT 1300).
II. Two courses from each of the three categories below (A, B, and C), for a total of six courses. (CMLT 1300 counts as one of the two courses from category C.)
III. At least three of the total shall be upper division courses.
IV. No more than two of the total may overlap with the student's primary major.

These courses shall be chosen as follows:

A. Two courses in the literature of a language other than English. All materials in these courses must be in the original language. These courses include the following:

In the Department of Classical Studies:

GREK 2302	Readings in Classical Greek Literature
GREK 2303	Readings in the New Testament
GREK 3301	Homer and the Greek Epic
GREK 3302	Attic Prose
GREK 3303	Greek Drama
GREK 3304	Greek Historians
LATN 3302	Virgil and Latin Epic
LATN 3303	Latin Prose to 43 B.C.
LATN 3304	Lyric and Elegiac Poets
LATN 3305	Latin Prose from 43 B.C.
LATN 3306	Comedy and Satire

In the Department of Modern Languages and Literatures:

CHIN 3312	Chinese Cinema
CHIN 4321	Topics in Modern Chinese Literature
CHIN 4351	Classical Chinese
FREN 3305	Introduction to French Literature I
FREN 3306	Introduction to French Literature II
FREN 4301	Medieval French Literature
FREN 4302	Topics in French Literature of the Sixteenth Century
FREN 4303	Topics in French Literature of the Seventeenth Century
FREN 4304	Topics in French Literature of the Eighteenth Century
FREN 4305	Topics in French Literature of the Nineteenth Century
FREN 4306	Topics in French Literature of the Twentieth Century
FREN 4307	French Cinema
FREN 4310	Senior Seminar in Literature
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
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	The Generation of '98
SPAN 4336	Twentieth-Century Spanish Literature
SPAN 4338	Spanish Women Writers
SPAN 4341	Literature of Colonial Spanish America
SPAN 4342	Spanish American Literature of the Nineteenth Century
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
SPAN 4361	Literature of Social Protest in Spanish America

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, courses in American or British literature offered in the Department of English, the course in American drama offered in the Department of Speech and Drama, and the FILM 1301 course (cross-listed as ARTH 1301, COMM 1302, ENGL 1301, and ML&L 1301). These may also include the following courses offered in the Department of Religion: RELI 3351 Narratives in the Hebrew Bible, and RELI 3352 Poetry in the Hebrew Bible.

C. CMLT 1300, and one additional course to be chosen from the following list of courses with strong comparative components.

CLAS 1305	Classical Mythology
CLAS 1307	Gender and Identity in the Ancient World
CLAS 3302	Greek and Roman Epic
CLAS 3303	Greek and Roman Drama
CLAS 3304	The Ancient Romance and Novel
CLAS 3305	Antiquity and Modernity
CMLT 1300	Introduction to Comparative Literature (REQUIRED)
DRAM 2333	History of Drama and Theatre I
DRAM 2334	History of Drama and Theatre II
DRAM 3335	Studies in Classical Drama
DRAM 3336	Modern Drama
DRAM 3337	Contemporary Drama
ENGL 2305	World Literature
ENGL 2306	Medieval Imagination
ENGL 3305	Culture and Creativity in the Middle Ages and Renaissance
ENGL 3322	Greek and Roman Drama (Also listed as CLAS 3303 and DRAM 3335.)
ENGL 3329	Jewish Literature
ENGL 3337	Literary Theory
ENGL 3338	Ideology
ENGL 3359	Medieval Literature
ENGL 3375	Postmodern Literature
ENGL 3385	The Continental Novel
ENGL 4323	Studies in American Literature: The Circum-Atlantic World; The Haitian Revolution
ENGL 4327	Literature of the Holocaust
FILM 2301	International Cinema (Also listed as ARTH 2301, COMM 2301, ENGL 2300, and ML&L 2301.)
ML&L 3320	German Literature in Translation: Fairy Tales
ML&L 3320	German Literature in Translation: Faust – Early Superman
PHIL 3325	Existentialism
PHIL 3336	Philosophy of Literature
PLSI 1332	Film, Literature, and Politics of the Third World
RELI 3346	Islamic Literatures

CMLT 1300 Introduction to Comparative Literature
Examines with a cross-cultural perspective texts from around the world. The course provides an introduction to the interdisciplinary field of comparative literature. (Also listed as ENGL 1305.)

CMLT 2301 World Literature and the Environment
Examines literary texts from around the world with an emphasis on environmental issues and a global perspective.

CMLT 3-90 Reading and Conference
Individual work under faculty supervision not covered by other courses. May be repeated up to six hours.
Prerequisites: Completion of CMLT 1300 and consent of instructor.

COMPUTER SCIENCE

MAURICE L. EGGEN, Ph.D., Professor
THOMAS E. HICKS, Ed.D., Associate Professor
JOHN E. HOWLAND, Ph.D., Professor
MARK LEWIS, Ph.D., Associate Professor
BERNA L. MASSINGILL, Ph.D., Associate Professor
J. PAUL MYERS, JR., Ph.D., Professor; Chair
GERALD N. PITTS, Ph.D., Caruth Distinguished Professor of Computer Science
YU ZHANG, Ph.D., Assistant Professor

THE MAJOR

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

I. The common curriculum

II. Departmental requirements:

42 semester hours including:

A. The Principles:
CSCI 1320, 1321, 2320, 2321, 2322, 3320, 3321, 4320.
B. Additional Requirements:
CSCI 1194, 1323.
C. Professional/Ethical/Design Seminar (2 hours).
D. Senior Software I, CSCI 4385 and Senior Software II, CSCI 4386; or Senior Thesis, CSCI 3398, 4398, 4399.
E. Six additional upper division computer science hours sufficient to total at least 42 semester hours.

III. Additional requirements include MATH 1311 and two of the following courses: MATH 1312; 1320 or 3334; 3323; CSCI/MATH 2324 or 3351; PHIL 2340; 3340.

IV. Completion of the Senior Experience: CSCI 4386 or Senior Thesis, 4399.

V. Electives sufficient to total 124 semester hours.

COMPUTING AS A SECOND MAJOR

The requirements for Computing as a Second Major are as follows:

I. The common curriculum

II. Departmental requirements:

30 hours of computer science including:

A. Required courses: CSCI 1320, 1321, 1323, 2320.
B. 18 additional hours of computer science including 15 upper-division hours.

III. Additional requirements are one of the following:

Note: At most one of the following courses may be counted for either A or B: MATH 1320, PSYC 2401, and BUSN 2301.

A. Nine hours selected from MATH 1311, MATH 1312, MATH 1320, PHIL 2340, PSYC 2401, and BUSN 2301.
B. Six hours selected from the list in III.A and three hours of upper-division CSCI.

IV. Completion of a first major from another department.

V. Completion of the Senior Experience as specified in the student's first major.

VI. Electives sufficient to total 124 semester hours.

MINOR IN COMPUTER SCIENCE

The department offers a minor in Computer Science. This minor is designed to provide students with entry-level skills in computing, as well as a substantial computing background for graduate studies in fields where computers have become primary research tools. This minor consists of at least 21 hours of Computer Science and at least 6 hours of Mathematics. The Computer Science requirements are CSCI 1320 (or 1311 and 1120), 1321, 1323, 2320, plus at least three additional upper division Computer Science electives. The Mathematics requirements are MATH 1311 and one of the following courses: MATH 1312; 1320 or 3334; 3323; CSCI/MATH 2324 or 3351; PHIL 2340; 3340.

MINOR IN MANAGEMENT INFORMATION SYSTEMS

For the business-oriented student, the department offers a minor in Management Information Systems. This minor is designed to provide students

with some knowledge of business principles and the necessary background to permit them, through the use of computer operations, to efficiently manage and transmit information.

The requirements are as follows:

I. Those courses required for the B.A., B.S., or minor in Business Administration.

II. CSCI 1320, 1321, 2320, plus three upper division Computer Science courses.

SENIOR SOFTWARE

Requirements include:

1. Successful completion of CSCI 4385 in the fall semester of the senior year.
2. Successful completion of CSCI 4386 in the spring semester of the senior year.

SENIOR THESIS

Requirements include:

1. Overall grade point average of 3.0 or better at the time the thesis option is selected.
2. Grade point average in computer science of 3.0 or better at the time the thesis option is selected.
3. Successful completion of CSCI 3398 in the spring semester of the junior year.
4. Successful completion of CSCI 4398 in the fall semester of the senior year.
5. Successful completion of CSCI 4399 in the spring semester of the senior year.
6. Select a faculty committee consisting of a thesis chair chosen from the computer science faculty and two additional faculty members during the spring semester of the junior year.
7. During the spring semester of the senior year a public formal presentation and defense of the thesis is made.
8. Accepted thesis will be bound and placed in the library. Binding costs will be paid by the student.

HONORS IN COMPUTER SCIENCE

To be eligible for the distinction of graduation with *Honors in Computer Science* the requirements are:

1. Select the senior thesis capstone option described above.
2. Grade point average of at least 3.33 or better in all courses prior to the semester of graduation.
3. Grade point average of 3.33 or better in all computer science courses prior to the semester of graduation.
4. Submit in writing a request for honors consideration to the department chair in the semester prior to the semester of graduation.

The decision of whether or not to confer the honors designation will be made by the departmental faculty and will be determined by departmental vote. The criteria include quality of the written thesis, quality of the oral presentation, and contribution to the field.

When a thesis receives the honors designation, this designation is so noted on the student's transcript and announced at graduation.

Students who successfully complete CSCI 4399 with a grade of C or better, but fail to achieve honors status or fail to meet the thesis deadline, will satisfy the capstone requirement provided they complete the thesis publication and pay the binding fee so the thesis may be placed in the library.

COURSES

CSCI 1101 Laboratory for Great Ideas in Computer Science
Laboratory experiments in computer science. Techniques for constructing experiment software and analysis of experimental data. Must be taken concurrently with CSCI 1301.

CSCI 1120 Low-Level Computing
Seminar on concepts of computing that are close to the machine level. The course teaches skills such as command line processing and programming in a language that exposes more of the underlying machine. Internal data representations will also be explored. This course cannot be taken by students who already have credit for CSCI 1320.
Prerequisite: CSCI 1311 or consent of instructor.

CSCI 1194 A Survey of Computer Science
Introduction to a variety of computer science topics such as networking, computer architecture, operating systems, parallel processing, computer graphics, theory, simulation, modeling, database systems, language paradigms, gaming, robotics, web site design, and virtual reality. This course, team-taught by Computer Science department faculty, is typically offered in the Fall only, and is normally taken concurrently with CSCI 1320 or 1321.

CSCI 1300 Essential Computing Skills
Introduction to computer skills. Computing hardware, software, files, and formats. Text processing. Numbers and quantitative analysis. Information structure and retrieval. Graphics and visualization. Communication, networking, and the Internet. Computer ethics, privacy and legal use of software and data. Solution of several problems illustrating each of these skill areas. No credit after completion of CSCI 1321.

CSCI 1301 Great Ideas in Computer Science
Introduction to computer science topics for students majoring in disciplines other than computer science. Topics include computer organization, computer arithmetic, computer circuits, algorithms, data structures, programming methodology, software engineering, language translation, program execution time, computer networks, parallel computation, computability, and artificial intelligence. Impact of computer science on modern society. Must be taken concurrently with CSCI 1101.

CSCI 1302 Introduction to Computing: Business Applications
An introduction to computers and programming with special emphasis on applications for nonscientists, including business and data processing. Introduction to programming in BASIC. Applications packages including spreadsheet, database, and word processing. Computer solution of several business and data processing applications and interpretation of results. No credit after completion of CSCI

1304. Does not count toward the 42 hours required for a computer science major.

CSCI 1303 Essential Computer Skills in Education
Computer skills and the integration of technology into education. Computing hardware, software, files, and formats. Text processing. Numbers and quantitative analysis. Information structure and retrieval. Graphics and visualization. Communication, networking, and the World Wide Web. Computer ethics, privacy and legal use of software and data. Examples and solution of several problems applying each of the skills areas to K-12 teaching and learning.

CSCI 1304 Computers and Society
An examination of the impact of computer technology on issues of society and culture. The course will contain several components: an introduction to computing (software and hardware concepts); an introduction to problem-solving using one or more high-level languages/software applications to include information retrieval and processing (numeric, text, and graphics); computer communications; and discussions of the uses and ethical issues surrounding computers in our society. No credit after completion of CSCI 1300, 1302, 1320, or 1321.

CSCI 1311 Introduction to Programming Logic
Introduction to the basics of computer programming and logic as applied to problem solving for non-science majors. Use of a highly graphical environment will stress creativity in the application of the scientific method to problem solving. The course will cover the basic concepts of object-oriented programming including objects, methods, sequences of instructions, conditionals, loops, and simple collections.

CSCI 1320 Principles of Algorithm Design I
Introduction to the notion of an algorithm. Survey of algorithmic problem solving principles in relation to computer solutions: divide and conquer, searching and sorting strategies, recursion, and structured programming. Top-down design and analysis of algorithms. Computer organization. Computer programming solutions to several laboratory exercises. May be taken concurrently with CSCI 1323, 2322.

CSCI 1321 Principles of Algorithm Design II
Algorithm development, program logic, program design strategies, program implementation strategies. Program correctness and program verification, algorithm analysis, and computational complexity. User defined structures, data types, specification requirements, sequential and direct access files, sorting, searching, and computer organization. Abstract data types including stacks, queues, and linked lists. Computer programming solutions to several laboratory exercises. May be taken concurrently with CSCI 1323, 2322.
Prerequisite: CSCI 1311, 1320, or consent of instructor.

CSCI 1323 Discrete Structures
Algebra of sets including mappings, relations, and functions. Algebraic structures including semigroups, groups, and propositional logic. Boolean algebra. Elements of the theory of directed and undirected graphs. Application of these structures to various areas of computer science. May be taken concurrently with CSCI 1311, 1320, or 1321.

CSCI 2194 Professional/Ethical/Design Seminar
Emphasis changes each semester. Topics include professional concerns (legal issues including software licensing, warranties, patents, copyrights, etc.) and history of the field, ethical issues in computing, introduction to large-scale design through examples of good versus bad design.
Prerequisite: CSCI 1194 or consent of instructor.

CSCI 2318 Computers in Music
Software tools for music applications. Historical development of musical encoding systems, including DARMS, MUSTRAN, SML, and MIDI. Musical applications programming. Chronological survey of the uses of computers in music. Common themes in the development of music programming languages. Examples of the use of sophisticated software in the development of solutions to elementary musical analysis tasks.
Prerequisites: Sophomore standing, computer literacy, and music literacy.

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.
Prerequisites: CSCI 1321, and either CSCI 1320 or CSCI 1311 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.
Prerequisites: CSCI 1321, and either CSCI 1320 or 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. May be taken concurrently with CSCI 1320, 1321.

CSCI 2323 Scientific Computing
This course will cover both numerical and text processing methods with problems chosen from the sciences and mathematics. The course will also focus on the general idea of how computational science has expanded the realm of what is possible in the sciences. The course builds on basic programming knowledge to give students understanding and skills as to how computers are used in the sciences.
Prerequisites: CSCI 1320, MATH 1311 or 1307.

CSCI 2324 Numerical Calculus
Introduction to the numerical algorithms fundamental to scientific computer work. Elementary error analysis, interpolation, quadrature, linear systems of equations, and introduction to the numerical solution of ordinary differential equations. (Also listed as MATH 2324.)
Prerequisites: CSCI 1120 or 1320, MATH 1311.

CSCI 3194 Professional/Ethical/Design Seminar
Emphasis changes each semester. Topics include professional concerns (legal issues including software licensing, warranties, patents, copyrights, etc.) and history of the field, ethical issues in computing, introduction to large-scale design through examples of good versus bad design.

Prerequisite: CSCI 2194 or consent of instructor.

CSCI 3291 Current Topics in Computer Science
New developments in the field of computer science, beyond the scope of standard courses, of interest to faculty and students. May be taken more than once, as long as course content changes.
Prerequisites: CSCI 2320; others determined by course content.

CSCI 3311 Information Assurance and Security
A contemporary introduction to the broad area of security in computing systems, exploring issues that abound when attempting to secure information in an interconnected society. An information-based examination of risk modeling, assessment, and management; ethics; policies and behaviors; cryptography; code security; data security; operating system security; and network security. Approaches to assure information confidentiality, integrity, and availability (CIA).
Prerequisite: CSCI 2320.

CSCI 3320 Principles of Theoretical Computer Science
Core topics from finite automata, languages, and the theory of computation. The Chomsky hierarchy, abstract machines, and their associated grammars. Models of computation (e.g., Turing machines), Church's thesis, unsolvability, and undecidability. Computational complexity, intractability, and NP-completeness.
Prerequisites: CSCI 2320, 1323, and Junior standing.

CSCI 3321 Principles of Software Engineering
Issues involved in developing large-scale software systems. Models for the software lifecycle; techniques and tools of analysis, design, programming, testing, debugging, and maintenance. May include formal methods, CASE, expert systems, case studies.
Prerequisites: CSCI 2320, 1323, and Junior standing.

CSCI 3342 Computer Networks
Local area networks, high-speed networks, and bridges. Wide area networks and internetworking. Network protocols including OSI protocols. Network security, reliability, and performance. Laboratory experience with one or more network protocols.
Prerequisite: CSCI 2320.

CSCI 3343 Database Systems
The goals of DBMS including data independence, relationships, logical and physical organizations, schema and subschema. Entity relationship diagrams. Hierarchical, network, and relations models. Data definition and data manipulation languages. Query languages, relational algebra, and relational calculus. Data normalization techniques, data security integrity, and recovery. Case studies of several existing systems.
Prerequisite: CSCI 2320.

CSCI 3344 Artificial Intelligence
The purpose of this course is to update the student on state-of-the-art artificial intelligence concepts, such as heuristic programming, state-space search techniques, and/or graphs for problem solving, game playing techniques, theorem proving procedures for propositions and first-order logic, knowledge representation, and examples of knowledge-based systems.
Prerequisites: CSCI 1323, 2320.

CSCI 3351 Numerical Analysis
Methods of solution of algebraic and transcendental equations, simultaneous linear algebraic equations, numerical integration and differentiation, initial and boundary value problems or ordinary differential equations. (Also listed as MATH 3351.)
Prerequisites: CSCI 1321, MATH 3336.

CSCI 3352 Simulation Theory
Introduction to simulation, discrete simulation models, queuing theory, and stochastic processes. Survey of simulation languages. Simulation methodology including generation of random numbers, design of simulation experiments, and validation of simulation models.
Prerequisites: CSCI 1120 or 1320, and knowledge of statistics.

CSCI 3353 Graphics
Survey of display devices, display data structures, graphics input, 2D transformations, windowing, clipping, viewing, 3D transformations, perspective, depth, hidden line removal. Graphics programming techniques and several laboratory problems using available graphics devices.
Prerequisites: MATH 1311, CSCI 2320.

CSCI 3361 Analysis of Algorithms
Complexity of algorithms, time and space requirements, and trade-offs. Searching and sorting, mathematical algorithms, graph and combinatorial algorithms. Divide and conquer, branch and bound, dynamic programming, exhaustive search. Limitations, intractability and NP-completeness, approximation algorithms.
Prerequisites: CSCI 1321, 1323.

CSCI 3366 Introduction to Parallel Processing
An introduction to parallel processing with particular emphasis on algorithm development. Comparison between sequential and parallel algorithm development. Survey of hardware and software for parallel processing. Comparison of symmetric multiprocessors and parallel processors. Discussion of architectures and mappings of virtual to physical machines. Models of parallel computation including parallel random access machines, circuits, and networks. Students will be expected to implement several projects in a suitable parallel programming environment.
Prerequisite: 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 3-94 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 3398 Thesis Reading
Independent study in selected areas in preparation for Thesis. Spring.
Prerequisites: CSCI 1323, 2320, Junior standing, and consent of instructor.

CSCI 4194 Professional/Ethical/Design Seminar
Emphasis changes each semester. Topics include professional concerns (legal issues including software licensing, warranties, patents, copyrights, etc.) and history of the field, ethical issues in computing, introduction to large-scale design through examples of good versus bad design.
Prerequisite: CSCI 3194 or consent of instructor.

CSCI 4320 Principles of Operating Systems
Introduction to operating systems, batch systems, multiprogramming systems, multiprocessor systems, input-output systems, interrupt handling, language processors, file management systems, concurrency, teleprocessing systems.
Prerequisite: CSCI 2321.

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, including CSCI 3321.

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. This course fulfills the Senior Experience requirement of the University's Common Curriculum.
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
Individual research and scholarly investigation under faculty supervision leading to the preparation of a senior thesis. 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 is a requirement for the completion of this course. Spring. This course fulfills the Senior Experience requirement of the University's Common Curriculum.
Prerequisite: CSCI 4398 and consent of instructor.

EAST ASIAN STUDIES

ANGELA BREIDENSTEIN, Ed.D., Associate Professor, Education
RICHARD M. BURR, Ph.D., Professor, Business Administration
DONALD N. CLARK, Ph.D., Professor, History; Co-Director
STEPHEN L. FIELD, Ph.D., J. K. and Ingrid Lee Endowed Professor of Chinese Language and Literature, Modern Languages and Literatures; Co-Director
CHIA-WEI LEE, D.M.A., Associate Professor, Music
RANDALL L. NADEAU, Ph.D., Professor, Religion
JIE ZHANG, Ph.D., Assistant Professor, Modern Languages and Literatures

East Asian Studies at Trinity (EAST) is an interdisciplinary undergraduate degree program that combines the intensive study of East Asian languages and cultures with the study of the social sciences and business in an East Asian context. For each student, the study of the language will be fully integrated with the study of other disciplines through each year of the college career, insuring that the graduate will not only be proficient in the language, but that he or she will have achieved an advanced level of understanding across the curriculum. The number of hours required for completion of the program may not be fewer than 42 for the major and 24 for the minor. The student who completes the major in East Asian studies will receive a Bachelor of Science degree in Chinese Studies.

THE MAJOR

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

I. The Common Curriculum

II. A core curriculum in East Asian culture (12 semester hours; at least one course from each of the following categories):

A. Art and Civilization

ARTH 1310	Introduction to Asian Art: China
CHIN 2311	Chinese Civilization
CHIN 3313	Cities of Strangers: Trans-Cultural Chinese Cinema
ML&L 3303	Chinese Cinema: A Historical and Cultural Perspective

B. History

HIST 1320	History of China
HIST 1324	Modern East Asia

C. Philosophy and Religion

PHIL 1302	Introduction to Asian Philosophy
RELI 1330	Asian Religions

III. The concentration in Chinese studies:

A. Completion of 21 semester hours of upper division Chinese language and literature courses taught in Chinese.

CHIN 3301	Third-Year Chinese I
CHIN 3302	Third-Year Chinese II
CHIN 4301	Fourth-Year Chinese I
CHIN 4302	Fourth-Year Chinese II
CHIN 4310	Advanced Conversation and Composition
CHIN 4321	Topics in Modern Chinese Literature
CHIN 4351	Classical Chinese
CHIN 4390	Reading and Conference
CHIN 4391	Selected Topics

B. Completion of 9 semester hours of upper division electives. At least one course must be taken from each of the following courses. Courses not focused solely on China must contain at least one-third of their content on the subject of China.

1. History, Political Science, and Religion

HIST 3320	The Chinese Revolution
HIST 3324	History of Korea
HIST 4420	Seminar in Asian History
PLSI 3339	Special Topics in Comparative Politics (with advisor approval)
PLSI 3349	Special Topics in International Politics (with advisor approval)
PLSI 3369	Special Topics in Political Theory (with advisor approval)
PLSI 3372	Research Methods in Political Science (with advisor approval)
RELI 3313	Religion and Science in Asia
RELI 3332	The Buddhist Tradition
RELI 3333	Chinese Religions
RELI 3391	Special Topics in Religion (with advisory approval)

2. Business and Economics

BUSN 3330	The Culture of Business in China
BUSN 3396	Internship in International Business (with advisor approval)
BUSN 3347	International Trade (with advisor approval)
ECON 3361	International Finance (with advisor approval)
ECON 3371	Internship (with advisor approval)
FNCE 3390	Studies in Finance (with advisor approval)
MGMT 3390	Studies in Management (with advisor approval)
MKTG 3390	Studies in Marketing (with advisor approval)

IV. Completion of at least one semester abroad in a Chinese-speaking country.

V. The Senior Experience requirement will be satisfied by completing CHIN 4001.

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 and Civilization

ARTH 1310	Introduction to Asian Art: China
ARTH 1311	Introduction to Asian Art: Japan
CHIN 2311	Chinese Civilization

B. History

HIST 1320	History of China
HIST 1324	Modern East Asia

C. Philosophy and Religion

GNED 1303	Japanese Perspectives
PHIL 1302	Introduction to Asian Philosophy
RELI 1330	Asian Religions

II. The concentration in an East Asian language:

A. Completion of 12 semester hours of upper division language and literature courses taught in the target language.

CHIN 3301	Third-Year Chinese I
CHIN 3302	Third-Year Chinese II
CHIN 4301	Fourth-Year Chinese I
CHIN 4302	Fourth-Year Chinese II
CHIN 4310	Advanced Conversation and Composition
CHIN 4321	Topics in Modern Chinese Literature

or the equivalent study abroad coursework in an East Asian language

B. Completion of 6 semester hours of upper division electives taught in English

HIST 3320	The Chinese Revolution
HIST 3324	History of Korea
PLSI 3331	Political Economy of the U.S., Europe and Japan
RELI 3333	Chinese Religions
RELI 3334	Japanese Religions
BUSN 3330	The Culture of Business in China

- 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:

1. Completion of the fourth semester of an East Asian language, or its equivalent, with a grade of C or better.

2. 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.

ECONOMICS

RICHARD V. BUTLER, Ph.D., Professor
NELS P. CHRISTIANSEN, Ph.D.*, Assistant Professor
JORGE G. GONZALEZ, Ph.D., Professor
ERIKA GULYAS, Ph.D., Assistant Professor
JOHN H. HUSTON, Ph.D., Professor; Chair
DAVID A. MacPHERSON, Ph.D., E. M. Stevens Professor
ROGER W. SPENCER, Ph.D., Vernon F. Taylor Distinguished Professor
JOHN J. McCUSKER, Ph.D., Ewing Halsell Distinguished Professor of American History
RICHARD J. SALVUCCI, Ph.D., Professor
EDWARD J. SCHUMACHER, Ph.D., Associate Professor of Health Care Administration
ELIZABETH A. WATSON, Ph.D., Assistant Professor

THE MAJOR

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

I. The common curriculum

II. Departmental requirements:

Economics majors may choose among six separate curricula:

A. General Economics
Students desiring to major in Economics without selecting a concentration must complete 30 semester hours in Economics, including ECON 1311, 1312, 2320, 3325, and 3326. (MATH 1320 or 3335* may be substituted for ECON 2320.)
Recommended: MATH 1307 or 1311.

B. Concentration in Theoretical Economics
This concentration emphasizes mathematics and economic theory. It is recommended as the appropriate preparation for Ph.D. programs in economics.
Departmental Requirements:
1. 30 semester hours in Economics, including:
   a) ECON 1311, 1312, 3325, 3326, 4367, and 4370;
   b) ECON 3351 or 4365.
2. MATH 1311, 1312, 2321, 3334, 3335, and 3336. (This combination satisfies the requirements for the minor in mathematics.) In addition, MATH 3338 is recommended.

C. Concentration in Economics and Law
This concentration stresses the application of economic theory to questions of legal and social policy. It is especially appropriate for those planning to enter law school.
Departmental Requirements:
1. 30 semester hours in Economics, including ECON 1311, 1312, 2320, 3325, 3326, 3336, 3338, and 3339. (MATH 1320 or 3335* may be substituted for ECON 2320.)
2. Three courses, approved by the advisor, from departments other than Economics:
   a) a course stressing the case method of legal instruction (e.g., BUSN 3302);
   b) an appropriate course in logic, writing, or speech communication (e.g., SPCH 1333);
   c) a course that views the law from a perspective other than that of economics (e.g., PHIL 3353).

Recommended: MATH 1307 or 1311.

D. Concentration in Economics and Business
This concentration is a liberal arts curriculum designed for students planning to enter graduate schools of business administration. In addition to a solid grounding in Economics, this concentration provides an introduction to many of the basic business subjects that students will encounter in MBA programs.
Departmental Requirements:
1. 30 semester hours in Economics, including:
   a) ECON 1311, 1312, 2320, 3325, and 3326 (MATH 1320 or 3335* may be substituted for ECON 2320);
   b) ECON 3329 or 3362;
   c) ECON 3336 or 3338 or 3356;
   d) ECON 3347 or 3348 or 3361.
2. 18 semester hours outside Economics, including:
   ACCT 1301, BUSN 3302, MIS 2301, MKTG 2301, FNCE 3301, and MGMT 2301.

Recommended: MATH 1307 or 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:
1. 33 semester hours in Economics, including:
   a) ECON 1311, 1312, 2320, 3325, 3326, 3347, and 3348. (MATH 1320 or 3335* may be substituted for ECON 2320.)
   b) ECON 3340 or 3341 or 3342 or 3343 or 3361.
2. Three upper division semester hours in a modern foreign language.
3. Two courses, approved by the advisor, that emphasize current sociopolitical aspects of: 1) a foreign country; 2) a group of foreign countries; and/or 3) the relations between several countries or areas of the world.

Recommended: MATH 1307 or 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:

1. 33 semester hours of Economics, including:
   a) ECON 1311, 1312, 2320, 3323, 3325, 3326, and 3330 (MATH 1320 or 3335* may be substituted for ECON 2320);
   b) Two of ECON 3334, 3336, and 3338 (with approval of the advisor, ECON 3340 or 3347 may be substituted for one of these).
2. A course taught by the case method of instruction (e.g., BUSN 3302, ECON 3336).
3. Two courses that examine the analysis or implementation of public policy from a perspective other than that of economics (e.g., HCAD 3350, PLSI 3313, SOCI 3339, URBS 3336/PLSI 3316).

Recommended: MATH 1307 or 1311, and MATH 1312.

NOTE: ECON 3336 may be used to satisfy only one of the requirements for this concentration.

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.

III. Senior Experience.

The Department of Economics does not require a specific capstone course or thesis as part of its major requirements. Economics majors have the following options for fulfilling the Senior Experience requirement of the Common Curriculum:

The Senior Interdisciplinary Seminar (GNED 4300).
The Senior Synthesis (GNED 4301).
The Capstone Course or Senior Thesis they complete for another major.
The Capstone Course in Economics (ECON 4349) (students choosing this option must also register for the non-credit course ECON 4001) (Senior Experience).
An Honors Thesis (ECON 4-98).

Students electing any of these options must complete them in addition to the hours required for the Economics major.

IV. Electives sufficient to total 124 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 semester hours of Economics, including ECON 1311, 1312, and either 3325 or 3326. At least half the 18 semester hours must be in upper division courses, and at least nine semester 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

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 2320 Statistics for Management and Economics
Applications of statistical techniques to business and economics. Decision-making based on sampling theory, parametric tests of significance, simple and multiple regression and correlation, and time series analysis. (Also listed as BUSN 2301.)

UPPER DIVISION

ECON 3121 Economists in the Schools (Primary)
The application and communication of economic ideas in an educational context. Teams of Trinity students help teach Economics in local elementary schools by creating and leading hands-on activities that illustrate and apply fundamental economic concepts. May be repeated for credit with permission of the instructor.
Prerequisites: ECON 1311 or one of the Education Practicum courses (EDUC 2201, 2202, or 2302), and consent of instructor.

ECON 3122 Economists in the Schools (Secondary)
The application and communication of economic ideas in an educational context. Teams of Trinity students help teach Economics in local secondary schools by creating and presenting applications of fundamental economic concepts. May be repeated for credit with permission of the instructor.
Prerequisites: ECON 1311 and 1312, and consent of instructor.

ECON 3141 La economía mexicana (The Mexican Economy)
Examination of significant contemporary issues affecting the economic life of Mexico: analysis of international, agricultural, financial, communications, and/or labor sectors of the economy and their relationship to Mexico's macroeconomic performance; special attention to the political situation in Mexico and its impact on the economy. (Also listed as INTL 3101.)
Prerequisites: SPAN 2302, ECON 1311, and 1312 or 3318; or consent of instructor.

ECON 3318 The Global Economy
An introductory survey of international economics aimed at students interested in political science, diplomacy, world affairs, history, or business. An examination of economic relationships among countries with an emphasis on the globalization process and the debate it has produced. Economic analysis is used to study the impact of imposing (or removing) barriers to trade and the problems of the balance of payments and the exchange rate. Special emphasis is given to the changing policy options available to governments, multilateral organizations, non-governmental organizations, and multinational corporations in the rapidly evolving global economy.
Prerequisite: ECON 1311. Cannot be taken for credit by students who have taken ECON 3347 or 3348 or 3361.

ECON 3323 The Economics of Government
Microeconomic analysis of governmental decision-making and the democratic process. Emphasis is on evaluating the economic efficiency of taxation and expenditure decisions of policymakers, and on how institutional arrangements of majority voting, representative democracy, political parties, bureaucracies, and special-interest groups affect those decisions.
Prerequisite: ECON 1311.

ECON 3325 Intermediate Microeconomics
An analytical study of decentralized economic decision-making, with primary emphasis on markets and prices. The range and precision of the analytical techniques developed in ECON 1311 are expanded substantially; these techniques are applied to a variety of economic situations, issues, and problems. Attention is given to the economic efficiency consequences of different market structures in both product and input markets, and of various kinds of government intervention in market processes.
Prerequisite: ECON 1311.

ECON 3326 Intermediate Macroeconomics
Theoretical analysis of changes in national income, price level, employment, and the international value of the dollar. Evaluation of alternative stabilization policies. Introduction to economic forecasting.
Prerequisites: ECON 1311 and 1312.

ECON 3329 Labor Economics and Labor Relations
Theories of the demand for and the supply of labor. Analysis of human capital formation, labor force participation, income distribution, unemployment, and unions. Case studies in labor relations. (Also listed as MGMT 3311.)
Prerequisites: ECON 1311 and 1312.

ECON 3330 Economics and the Environment
The economic problem of coping with a finite environment. Study of the interrelationships among economic growth, environmental quality, urban concentration, and resource constraints. Economic analysis of pollution control and other environmental policy problems. (Also listed as URBS 3330.)
Prerequisite: ECON 1311.

ECON 3333 Health Economics
An introduction to the application of the tools of microeconomics to issues in the organization, delivery, and financing of health care. Economic analysis will be utilized to better understand critical issues in health care such as the level and growth of health expenditures, the role of the government versus the private sector in financing care, the relationships between doctors, hospitals, insurance providers, patients, and employers, and the role of society in providing for the uninsured. (Also listed as HCAD 3333.)
Prerequisite: ECON 1311 or consent of instructor.

ECON 3334 Urban Economics
Analytical study of the reasons for cities to exist, the location of economic activity, the economic base of urban areas and the functioning of urban land markets. Economic analysis of selected urban policy issues such as local economic development, zoning and growth controls, housing, transportation, poverty, crime, and the provision of local public services. Attention is paid to the urban experience outside as well as within the U.S. (Also listed as URBS 3334)
Prerequisites: ECON 1311, and three hours of upper-division credit in either Economics or Urban Studies.

ECON 3335 Industrial Organization
The determinants of market structure and the effects of market structure on firm and industry behavior. The relationship between industry characteristics and desirable economic performance. Frequent applications to particular American industries.
Prerequisite: ECON 1311.

ECON 3336 Antitrust Economics
The role of antitrust policy in the American economy. Examines the major antitrust statutes and court opinions of the United States as they relate to market structures and business practices. Landmark antitrust cases are discussed and analyzed with economic theory in an effort to gain insight into the implications of business practices encompassed by the antitrust laws. The penalties and remedies for antitrust violations will also be discussed.
Prerequisite: ECON 1311.

ECON 3338 Government Regulation of Business
Economic analysis of direct government regulatory activity. The course first explores how regulation arises from the political process. These insights, and the tools of microeconomic theory, are then applied to analyze public policy in such fields as electricity, telecommunications, broadcasting, transportation and safety. (Also listed as BUSN 3338.)
Prerequisite: Three hours of upper-division Economics, or consent of instructor.

ECON 3339 Economic Analysis of Law
Economic analysis of such basic legal concepts as property, contracts, torts, and crime. Economic theory is also applied to the legal system itself, including an examination of such matters as law enforcement, civil procedure, and the effectiveness of legal sanctions.
Prerequisite: ECON 3325.

ECON 3340 Economic Growth and Development
An inquiry into the desirability, the methods of measurement, alternative strategies for, and the impact of individuals and groups within society on economic development. A survey of theories of economic development. Case studies in comparative perspective.
Prerequisites: ECON 1311 and 1312.

ECON 3341 Economic Development of Mexico
Economic aspects of Spanish colonialism; the transition to national independence; difficulties associated with the period through 1876; industrialization and development through the Revolution; the takeoff of the modern economy after 1940; contemporary issues.
Prerequisites: ECON 1311 and 1312.

ECON 3342 Latin American Economic History
A selective survey of the principal currents of economic growth and change in Latin America since the sixteenth century. Special attention given to the uneven formation of market economies and to problems associated with colonialism and neo-colonialism; with international financial crises and adjustment; and with ideologically diverse models of development. (Also listed as HIST 3348.)
Prerequisites: ECON 1311 and 1312.

ECON 3343 Slavery and the Atlantic Economy
Interdisciplinary analysis of the Atlantic market joining Europe, Africa, and the Americas from the sixteenth through nineteenth centuries, with particular emphasis upon slavery, the slave trade, and the development of the "plantation complex." Makes explicit use of economic theory to explain historical change. (Also listed as HIST 3395.)
Prerequisites: ECON 1311 and HIST 1334 or HIST 1340 or consent of instructor.

ECON 3344 Economic and Business History of the United States to 1865
A study of the development of American business and the economy through the U.S. Civil War. (Also listed as BUSN 3344 and HIST 3360).
Prerequisites: ECON 1311 and 3 hours of U.S. history or consent of instructor.

ECON 3345 Economic and Business History of the United States Since 1865
A study of the development of American business and the economy from the U.S. Civil War to the present. (Also listed as BUSN 3345 and HIST 3361).
Prerequisites: ECON 1311 and 3 hours of U.S. history or consent of instructor.

ECON 3346 La economía española y la Unión Europea (The Spanish Economy and the European Union)
An examination of Spain's economic development and its position within the European Union. The business, economic, and political transformation of Spain from a struggling nation with an authoritarian regime to an economic power with an open and democratic society are studied. The course also examines the development of the 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 NGOs in Spain. (Also listed as BUSN 3346, INTL 3346, and SPAN 3346.)
Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of instructor.

ECON 3347 International Trade
A study of the economic theory of international trade and the development of the practices of commercial policy. Emphasis is on the economic analysis of a variety of protectionist policies, the international institutions involved in trade and protectionist issues, the importance of trade for development, issues in international capital flows, and multinational corporations. Practice is provided in reading and understanding published sources of data and analysis.
Prerequisites: ECON 1312 and 3325.

ECON 3348 International Monetary Systems
A study of the principles and practices of foreign exchange, international money markets, the balance of payments, payments adjustment mechanism and the national policies for achieving both domestic and international objectives. Coverage includes the description and history of the relevant national and international institutions. Practice is provided in understanding recent international economic events and current policy issues. (Also listed as FNCE 3348.)
Prerequisites: ECON 1311 and 1312.

ECON 3351 Development of Economic Thought
A survey of the "Great Books" of Economics from Adam Smith's Wealth of Nations to John Maynard Keynes's General Theory. The course is intended to acquaint students with the ideas of the creators of economic theory in an effort to understand the intellectual forces that have shaped modern economic thought. Classical, Marxian, Neo-Classical, Institutional, and Keynesian theory will be studied and analyzed against the backdrop of the times in which the ideas were developed.
Prerequisites: ECON 1311 and 1312.

ECON 3356 Financial Institutions and Markets
Analytical investigation of the structure, efficiency, and regulation of financial markets and institutions. Topics include determination of the level and structure of interest rates, asset valuation, and the flow of funds between markets, theory and practice of financial intermediation, and the social utility of the financial sector. (Also listed as FNCE 3351.)
Prerequisites: Junior standing and ECON 1311 and 1312.

ECON 3361 International Finance
This course emphasizes the study of the global exchange rate and associated derivatives markets with particular emphasis on foreign risk hedging; the study of financial equilibrium relations and their effects on the international capital markets, and the potential arbitrage opportunities that result in the absence of equilibrium; and the use of case studies to illustrate the application of theoretical tools on the multinational corporate environment. (Also listed as FNCE 3361.)
Prerequisite: FNCE 3301 or consent of instructor.

ECON 3362 The American Corporation
This course acquaints the student with organization theory, corporate decision-making, and the role of the corporation in society. Contemporary corporate issues are discussed and analyzed through readings and the application of fundamental principles to case studies. (Also listed as BUSN 3313.)
Prerequisite: ECON 1311.

ECON 3365 Behavioral and Experimental Economics
Uses experimental findings to test existing theories and motivate the development of new ones. Students participate in both the design and running of experiments. Analyzes the impact of behavioral theories on such topics as trust, reciprocity, time discounting, portfolio choice, and altruism. Behavioral Economics incorporates psychological findings into both traditional economic and game theoretic models of decision making. Experimental Economics studies the design and methodology of economics experiments.
Prerequisite: ECON 3325 or consent of instructor.

ECON 3-71 Internship
Internships may be arranged with businesses, non-profit institutions, and government agencies. Economic analysis must be performed during the course of the internship, with work load requirements similar to those of a typical Economics course carrying the same number of hours of credit. The sponsoring institution develops a work program, to include written economic analysis, in conjunction with the supervising faculty member and the student. Students are limited to a maximum of six hours' credit for internship experiences.
Prerequisites: Six semester hours of economics and permission of the Department Chair.

ECON 3372 Práctica profesional en España (Internship in Spain)
A supervised summer internship in Spain. Students enrolled in ECON 3372 will serve as interns with various firms, trade groups, governmental agencies, or public interest groups where they will work and gain experience related to the Spanish economy and business world. The nature of the student's responsibilities will vary with the internship involved and be subject to the approval of the supervising faculty member. (Also listed as BUSN 3372, INTL 3372, and SPAN 3372.)
Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of instructor.

ECON 3-90 Research Topics
Supervised independent study on selected topics in economics.
Prerequisites: Junior standing, 3.0 grade average in economics, and permission of instructor.

ECON 3-98 Honors Readings
Independent study in selected areas in preparation for Honors Thesis. May be taken for up to three hours of credit.

ECON 4001 Senior Experience
Enrollment in this course is required in conjunction with ECON 4349 (Seminar in Economic Issues) for which a senior wishes credit for the senior experience. This course carries no credit by itself and is pass/fail.
Prerequisites: Consent of instructor and Senior standing.

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. This course fulfills the Senior Experience requirement of the University's Common Curriculum when accompanied by the non-credit course ECON 4001.
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 choices depend critically on what other people may choose. Topics include static games with complete information, dynamic games, games with uncertainty, and games with incomplete information. Emphasizes the application of game theoretic tools to a broad array of economic issues.
Prerequisites: ECON 3325, MATH 1312 and ECON 2320 (or equivalent) or consent of instructor.

ECON 4367 Advanced Microeconomic Theory
This course acquaints the student with classical microeconomic theory and enables him or her to construct mathematical economic models. Topics include: consumer theory; theory of the firm; multimarket equilibrium; decision-making under certainty; optimization over time; theoretical and applied welfare economics.
Prerequisites: 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 2320 (or equivalent), and MATH 1312 or permission of instructor.

ECON 4397 Seminar in Economics
Study of theoretical and empirical work in economics from scholarly books and periodicals. Independent research and group discussion. May be repeated when topics differ.
Topic A. Microeconomics
Topic B. Macroeconomics
Topic C. Labor Economics
Topic D. Selected topics
Prerequisite: Permission of instructor.

ECON 4-98 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.

EDUCATION

LAURA M. ALLEN, Ph.D., Associate Professor
ANGELA BREIDENSTEIN, Ed.D., Associate Professor
ROCIO DELGADO, Ph.D., Assistant Professor
PAUL KELLEHER, Ed.D., Norine R. Murchison Distinguished Professor of Education; Chair
JEFFREY NORDINE, Ph.D., Assistant Professor
PATRICIA J. NORMAN, Ph.D., Associate Professor
ELEANOR TERRY ROBERTSON, Ph.D., Associate Professor
THOMAS J. SERGIOVANNI, Ed.D., Lillian Radford Distinguished Professor of Education

5-YEAR TEACHER EDUCATION PROGRAM

The 5-year Teacher Education Program at Trinity University features preparation and certification in Early Childhood-Grade 4 6 (EC-6), Middle Grades (Grades 4-8), Grades 8-12, and All-Level Music. Supplemental certificates in Special Education and English as a Second Language (ESL) are also available. Students in teacher education major in the subject(s) they plan to teach, and the B.A. or B.S. degree in an academic discipline is awarded at the completion of undergraduate studies. The fifth year, which students must complete to satisfy Texas certification requirements and to receive the benefits of existing reciprocity agreements with other states, consists of a summer and two semesters. Upon completion of the fifth year, students receive a M.A.T. (Master of Arts in Teaching), a professional degree.

The purpose of the undergraduate requirements in teacher education is to ensure that students achieve the academic content mastery, the intellectual habits of mind, and the pedagogical readiness that are required to gain admission to the 5th year graduate program and, ultimately, to meet state teacher certification standards. We expect that Trinity undergraduates who plan to apply for the M.A.T. program will follow one of the plans for certification described in the catalogue. In certain exceptional cases – for example, students who make a late decision to apply to the 5th year program – applicants may be able to demonstrate that they have attained the prerequisite academic knowledge and skills, intellectual habits of mind, and pedagogical readiness through assessments other than a transcript review. These supplemental assessments may include: outstanding grades in courses in the proposed teaching field, additional standardized examinations such as the PRAXIS II in the proposed teaching field, and other performance exhibitions that the faculty determine.

ADMISSION TO TEACHER EDUCATION

Students apply to the Teacher Education Program upon completion of at least thirty (30) semester hours and at least one (1) practicum course. Application forms for admission to teacher education may be obtained in the Education Department, Storch Memorial Building.

Criteria considered in admission to the teacher education sequence are:

1. Completion of a practicum (EDUC 2201, 2202, or 2203) or equivalent;
2. Previous academic records and a grade point average of 3.0 (2.6 provisional) overall and in education coursework;
3. Passing scores on the Texas Higher Education Assessment (THEA) or evidence of exemption;
4. Recommendations by current and/or former professors and mentor teachers from the practicum; and
5. Approval of the faculty of the Department of Education and the Council on Teacher Education.

Continuance in the Teacher Education Program is dependent upon review and approval each semester by the faculty of the Department of Education and meeting graduate school admission requirements.

ADMISSION TO THE FIFTH-YEAR INTERNSHIP

Students admitted to teacher education must be approved for graduate studies in order to matriculate in the fifth year. The application for graduate studies must be completed during the senior year, and full admission requires a grade point average of 3.0 (2.6 provisional) on the last 60 hours of undergraduate work. Other performance criteria may include the PRAXIS II tests in teaching and in the content fields, assessments of academic work, and other performance assessments.

Continuance in the Master of Arts in Teaching program (the “fifth year”) is dependent upon review and approval each semester by the faculty of the Department of Education.

APPLICATION FOR CERTIFICATION

It is necessary to apply for a Texas teacher certificate through the Department of Education, and register with the Certification, Assessment, and Communications Specialist in the Department of Education, Storch Memorial Building. Application for certification must be made at the beginning of the semester in which the student will complete requirements, normally at the end of the fifth year.

All Teacher and Administrator Preparation Program graduates applying for state certification must pass proficiency tests, the ExCET or TExES examinations, in their fields of certification.

CERTIFICATION FOR ELEMENTARY GRADES 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. The Common Curriculum

II. Education Course of Study

A. EDUC 1105, 1106 recommended for first-year students.
B. EDUC 2201, 2202, 3301, 3302, 3320*, 3331, and 4100 are required. (EDUC 4100 fulfills the Senior Experience requirement of the University's Common Curriculum.)
C. CSCI 1303* is required.
D. MATH 2303 is required.

III. 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 (Same as DRAM 2340, ENGL 2340, GNED 2340, and MUSC 2340)
CLAS 1305* Classical Mythology
COMM 2302* Media Interpretation & Criticism
DRAM 2340* Creative Thinking and the Artistic Process (Same as ART 2314, ENGL 2340, GNED 2340, and MUSC 2340)
ECON 1311* Microeconomics
ECON 3121 Economists in the Schools
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
ENGL 2340* Creative Thinking and the Artistic Process (Same as ART 2314, DRAM 2340, GNED 2340, and MUSC 2340)
GNED 2340* Creative Thinking and the Artistic Process (Same as ART 2314, DRAM 2340, ENGL 2340, and MUSC 2340)
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
MUSC 2340* Creative Thinking and the Artistic Process (Same as ART 2314, DRAM 2340, ENGL 2340, and GNED 2340)
MUSC 2361 Music in Childhood
MUSC 2362 Music in Early Childhood
PLSI 1301* American Politics
PLSI 1331* Comparing Countries
PSYC 1300* Principles of Psychology
SOCI 1301* Introduction to Sociology
SOCI 1316* Places and Regions and Global Context (Same as URBS 1316)
SPCH 3360* Small Group Communication
SPCH 3372* Intercultural Communication
URBS 1316* Places and Regions in Global Context (Same as SOCI 1316)

CERTIFICATION FOR MIDDLE GRADES EDUCATION

Students seeking certification to teach in the middle grades (grades 4-8) in Texas should complete the following requirements:

Note: An asterisk (*) indicates a course that fulfills a common curriculum requirement.

I. The common curriculum

II. Education Course of Study

A. EDUC 1105 and 1106 are recommended for first-year students.
B. At least two practicum courses are required (EDUC 2202 plus EDUC 2201 or 2203).
C. EDUC 3302, 3320*, 3331*, and 4100 are required. (EDUC 4100 fulfills the Senior Experience requirement of the University's Common Curriculum.)
D. CSCI 1303* is required.

III. Teaching Field/Area of Certification

Students seeking certification at grades 4-8 or grades 6-12 will be certified in one or more teaching fields 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 forms the basis of the requirements for the teaching field. Students have two options to meet the requirements for a teaching field.

A. Departmental Major Plus Additional Requirements

Students pursue a major in an academic department at Trinity as well as additional courses that will prepare students for their teaching field and certification exam. Students may complete more than one major with additional requirements in order to attain certification in more than one area.

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 advisors and the supplemental advisor within the education department will be able to advise students in each area.

B. Composite Major or Interdisciplinary Studies Major

Students pursue a major in either Composite Science, Composite Social Studies, or Interdisciplinary Studies through the Department of Education.

CERTIFICATION AREAS:

English, Language Arts, and Reading 4-8 Certification

- **English Major**, including EDUC 3301 and EDUC 4338

English/Reading and Social Studies 4-8 Certification

- **Interdisciplinary Studies Major, English/Reading and Social Studies: *Completed through the Department of Education***

History: HIST 1340*, 3376, 3388; one lower division U.S. history course (HIST 1360*, 1361*, 1375*, 1376*); one lower division European history course (HIST 1310*, 1332*, 1334*, 1335*)
Economics: ECON 1311*, 1312*, and 3121 or 3122
Political Science: PLSI 1303 and 1331*
English: ENGL 2303* or 2304* or 2305*; 2311, 3302 or 3303; 3349
Reading: EDUC 3301, 3330, 3335, 4338
Note: EDUC 2201 or 2202 may be used as prerequisites for EDUC 3301.
Geography: URBS 1316/SOCI 1316: Introduction to Human Geography
Sociology and Anthropology: SOCI 1301

French 6-12 Certification

- **French Major**

German 6-12 Certification

- **German Major**, including GERM 3305*

Latin 6-12 Certification

- **Latin Major**, including LATN 3301; plus HIST 3318

Mathematics 4-8 Certification

- **Math Major**, including MATH 3334 (3341, 3343, 3355 are recommended)

Mathematics/Science 4-8 Certification

- **Interdisciplinary Studies Major, Mathematics and Science: *Completed through the Department of Education***
  (Note: Students will also receive a math minor upon completion of this major.)

Biology: 1111*, 1311*, 1212*, 1312*, and 3421
Chemistry: CHEM 1118*, 1318*, 2119*, and 2319*
Physics: PHYS 1111* and 1309*
Geosciences: GEOS 1304* or 1305* or 1407* and 2401* (lab prerequisite required)
Math: MATH 1311*, 1312*, 2321*, 3323, 3334, 3341 or 3343, and 3355

Science 4-8 Certification

- **Biology Major** (GEOS 1304 or 1305 and GEOS 2101)
- **Chemistry Major** (plus BIOL 1311 and 1111, GEOS 1304 or 1305 and GEOS 2101)
- **Physics Major** (plus BIOL 1311 and 1111, GEOS 1304 or 1305 and GEOS 2101, CHEM 1318 and 1118)
- **Geosciences Major** (plus CHEM 1318 and 1118, BIOL 1311 and 1111)
- **Composite Science Major: *Completed through the Department of Education***
  Students will complete the minimum requirements, as specified below. In addition, students must complete upper division hours to total at least twenty-four (24) semester hours in one area.

Biology: 1111*, 1311*, 1212*, 1312*, and 3421
Chemistry: 1118*, 1318*, 2119*, 2319*, 2220, and 2320
Physics: 1111*, 1309*, 1112*, 1310*, and 3 hours of Physics elective
Geosciences: 1304* or 1305* or 1407*, and 2401* (lab prerequisite required)

Social Studies 4-8 Certification

- **History Major**, including HIST 3376 and 3388, plus 1 course from U.S. history, 1 course from European history, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History
  Plus Economics (ECON 1311*, 1312*, 3122) [ECON 2320 and one (1) upper division economics course are recommended]
  Plus Political Science (PLSI 1303 and 1331*)
  Plus URBS 1316/SOCI 1316 (Human Geography) and PSYC 1300* or SOCI 1301* (both courses are recommended, but only one is required)
- **Economics Major**, including ECON 2320 and 3122
  Plus History (HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History)
  Plus URBS 1316/SOCI 1316 (Human Geography) and PSYC 1300* or SOCI 1301* (both courses are recommended, but only one is required)
- **Political Science Major**, including PLSI 1303 and 1331*
  Plus History (HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History)
  Plus Economics (ECON 1311*, 1312*, 3122) [ECON 2320 and one (1) upper division economics course are recommended]
  Plus URBS 1316/SOCI 1316 (Human Geography) and PSYC 1300* or SOCI 1301* (both courses are recommended, but only one is required)
- **Sociology Major**, including SOCI 1301*
  Plus History (HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History.
  Plus Economics (ECON 1311*, 1312*, 3122) [ECON 2320 and one (1) upper division economics course are recommended]
  Plus URBS 1316/SOCI 1316 (Human Geography)
  Plus Psychology (PSYC 1300*) is recommended, but not required

- **Composite Social Studies Major: *Completed through the Department of Education***
  Students must choose a concentration in history, economics, or political science. Fifty-two (52) to sixty-one (61) semester hours are required, depending on the concentration selected.

History Concentration

History: HIST 3376 and 3388; two (2) of the following courses: 1360* or 1375*, 1361* or 1376*, 3362, 3365, 3367, 3368; two (2) of the

following courses: 1310*, 1332*, 1334*, 1335*, 3365*, 3310, 3314, 3330, 3336; one (1) of the following courses: 1340, 3344, 3346; and one (1) of the following courses: 1320*, 1350*, 1351*
Economics: ECON 1311*, 1312*, 3122 [ECON 2320 and one (1) upper division economics course are recommended]
Political Science: PLSI 1303, 1331*, and one (1) of the following upper division courses: 3301, 3305, 3306, 3307, 3316
Social Sciences: URBS 1316/SOCI 1316 (Human Geography) and PSYC 1300* or SOCI 1301* (both courses are recommended, but only one is required)

Economics Concentration

Economics: ECON 1311*, 1312*, 2320, 3122, 3325, 3326; one (1) course in the historical perspective (ECON 3343, 3344, 3345, or 3351); one (1) course in the international perspective (ECON 3318 or 3347); and one (1) course in the public policy perspective (ECON 3323, 3330, 3334, 3336, 3338, or 3356)
History: HIST 3376 and 3388, plus 1 course from U.S. history, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History
Political Science: PLSI 1303, 1331*; and one (1) of the following upper division courses: 3301, 3305, 3306, 3307, 3316
Social Sciences: URBS 1316/SOCI 1316 (Human Geography) and PSYC 1300* or SOCI 1301* (both courses are recommended, but only one is required)

Political Science Concentration

Political Science: PLSI 1303, 1331*, 1341, 3345, 3361 or 3362*; and nine (9) hours from the following: 3301, 3303, 3304, 3305, 3306, 3307, 3313, 3314, 3316; 3351, 3352
History: HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History
Economics: ECON 1311*, 1312*, 3122 [ECON 2320 and one (1) additional upper division economics course are recommended]
Social Sciences: URBS 1316/SOCI 1316 (Human Geography) and PSYC 1300* or SOCI 1301* (both courses are recommended, but only one is required)

Spanish 6-12 Certification

- **Spanish Major**, including 3311 or 3312*

COMBINATION CERTIFICATION FOR GRADES 4-8 AND 8-12 EDUCATION

Students seeking certification to teach Grades 4-8 and Grades 8-12 in Texas should complete the following requirements:

I. The common curriculum

II. Education Course of Study (required courses)

A. EDUC 1105 and EDUC 1106 are recommended for first-year students.
B. EDUC 2202 and EDUC 2203.
C. EDUC 3302 and EDUC 3303.
D. EDUC 3320*, EDUC 3331*, and EDUC 4100. (EDUC 4100 fulfills the Senior Experience requirement of the University's Common Curriculum.)
E. CSCI 1300 or CSCI 1303.

III. Teaching Field/Area of Certification

Students seeking certification in grades 4-8 and 8-12 will be certified at two levels and in one or more teaching fields at the end of the Master of Arts in Teaching program. At the undergraduate level, students must complete a major to graduate from the university. This major forms the basis of the requirements for the teaching field. Students seeking dual certification must complete requirements for a teaching field at both the Grades 4-8 and Grades 8-12 levels. These fields include English, reading, science, social studies, and math. Internships in the program consist of one semester in a middle grades classroom and one semester in a high school classroom. Please contact the faculty member in charge of the program for more specifics.

CERTIFICATION FOR HIGH SCHOOL EDUCATION

Students seeking certification to teach at the 8-12 or the 6-12 grade level should complete the following undergraduate requirements:

Note: An asterisk (*) indicates a course that fulfills a common curriculum requirement.

I. The common curriculum

II. Education Course of Study

A. EDUC 1105 and 1106 are recommended for first-year students.
B. At least 2 practicum courses are required (EDUC 2203 plus EDUC 2201 or 2202).
C. EDUC 3303, 3320*, 3331*, and 4100 are required. (EDUC 4100 fulfills the Senior Experience requirement of the University's Common Curriculum.)
D. CSCI 1303 or CSCI 1300 required.

III. Teaching Fields/Area of Certification

Students seeking certification at grades 8-12 or grades 6-12 will be certified in one or more teaching fields 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 forms the basis of the requirements for the teaching field. Students have two options to meet the requirements for a teaching field.

A. Departmental Major Plus Additional Requirements

Students pursue a major in an academic department at Trinity as well as additional courses that will prepare students for their teaching field and certification exam. Students may complete more than one major with additional requirements in order to attain certification in more than one area.

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 advisors and the supplemental advisor within the education department will be able to advise students in each area.

B. Composite Major

Students pursue a major in either Composite Science or Composite Social Studies through the Department of Education.

Certification Areas:

Chemistry 8-12 Certification
- **Chemistry Major**

Computer Science 8-12 Certification
- **Computer Science Major**, including CSCI 3343
  (Note: CSCI required of all candidates for certification, including Computer Science candidates.)

English Language Arts and Reading 8-12 Certification
- English Major, including ENGL 3346 and EDUC 4338. ENGL 3304, GNED 3328, SOCI 3331, LING 1300, and PSYC 2330 are recommended but not required.

French 6-12 Certification
- **French Major**

German 6-12 Certification
- **German Major**, including GERM 3305*

History 8-12 Certification

Select from one of the following options:
- **History Major**, including HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History
  Plus URBS 1316/SOCI 1316 (Human Geography)
- **Composite Social Studies Major** (See Social Studies Certification 8-12)

Journalism 8-12 Certification
- **Communications Major**, including COMM 3340; two (2) of the following courses: COMM 3341, 3342, 3343, 3344; and two (2) of the following: COMM 3321*, 3322, 3324, 3326, 3328, 3362

Latin 6-12 Certification
- **Latin Major**, including LATN 3301; plus HIST 3318

Life Science 8-12 Certification

Select from one of the following options:
- **Biology Major**, including BIOL 3421
- **Composite Science Major** (See Science Certification 8-12)

Mathematics 8-12 Certification
- **Mathematics Major**, including MATH 3334 (3341, 3343, 3355 are strongly recommended, but not required)

Physical Science 8-12 Certification (Student is certified to teach Chemistry and Physics)

Select from one of the following options:
- **Chemistry Major**
  Plus Physics [PHYS 1111*, 1309*, 1112*, 1310*, 3323 (prerequisite waived)]
  Plus Geoscience [GEOS 1304* or 1305* or 1407*; and 2401* (lab prerequisite required)]
- **Physics Major**
  Plus Chemistry (CHEM 1118*, 1318*, 2119*, 2319*; 2220, and 2320)
  Plus Geoscience [GEOS 1304* or 1305* or 1407*; and 2401* (lab prerequisite required)]
- **Geoscience Major**
  Plus Chemistry (CHEM 1118*, 1318*, 2119*, 2319*; 2220, and 2320)
  Plus Physics [PHYS 1111*, 1309*, 1112*, 1310*, 3323 (prerequisite waived)]
- **Composite Science Major** (See Science Certification 8-12)

Physics/Mathematics 8-12

Select from one of the following options:
- **Physics Major**
  Plus MATH 1320 or 3334 (MATH 3341, 3343, 3355 are strongly recommended)
- **Mathematics Major**
  Plus PHYS [1111*, 1309*, 1112*, 1310*, 3323 (prerequisite waived)]

Science 8-12 Certification
- **Composite Science Major: Completed through the Department of Education**
  Students will complete the minimum requirements, as specified below. In addition, students must complete upper division hours to total at least twenty-four (24) semester hours in one area.

  BIOL 1111*, 1311*, 1212*, 1312*, and 3421
  CHEM 1118*, 1318*, 2119*, 2319*; 2220, and 2320

PHYS 1111*, 1309*, 1112*, 1310*, and 3323 (prerequisite waived)
GEOS 1304* or 1305* or 1407*; and 2401* (lab prerequisite required)

Social Studies 8-12 Certification

Select from one of the following options:

- **History Major**, including HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History
  Plus Economics (ECON 1311*, 1312*, 3122) [ECON 2320 and one (1) upper division economics course are recommended]
  Plus Political Science (PLSI 1303 and 1331*)
  Plus URBS 1316/SOCI 1316 (Human Geography) and PSYC 1300* or SOCI 1301* (both courses are recommended, but only one is required)
- **Economics Major**, including ECON 2320 and 3122
  Plus History (HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History
  Plus URBS 1316/SOCI 1316 (Human Geography) and PSYC 1300* or SOCI 1301* (both courses are recommended, but only one is required)
- **Political Science Major**, including PLSI 1303 and 1331*
  Plus History (HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History
  Plus Economics (ECON 1311*, 1312*, 3122) [ECON 2320 and one (1) upper division economics course are recommended]
  Plus URBS 1316/SOCI 1316 (Human Geography) and PSYC 1300* or SOCI 1301* (both courses are recommended, but only one is required)
- **Sociology Major**, including SOCI 1301*
  Plus History (HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History
  Plus Economics (ECON 1311*, 1312*, 3122) [ECON 2320 and one (1) upper division economics course are recommended]
  Plus Political Science (PLSI 1303 and 1331*)
  Plus URBS 1316/SOCI 1316 (Human Geography)
  Plus Psychology (PSYC 1300* is recommended, but not required)

- **Composite Social Studies Major: Completed through the Department of Education**
  Students must choose a concentration in history, economics, or political science.
  Fifty-two (52) to sixty-one (61) semester hours are required, depending on the concentration selected

  History Concentration

  History: HIST 3376 and 3388; two (2) of the following courses: 1360* or 1375*, 1361* or 1376*, 3362, 3365, 3367, 3368; two (2) of the following courses: 1310*, 1332*, 1334*, 1335*, 3365*, 3310, 3314, 3330, 3336; one (1) of the following courses: 1340, 3344, 3346; and one (1) of the following courses: 1350*, 1351*, 1320*
  Economics: ECON 1311*, 1312*, 3122 [ECON 2320 and one (1) upper division economics course are recommended]
  Political Science: PLSI 1303, 1331*; and one (1) of the following upper division courses: 3301, 3305, 3306, 3307, 3316
  Social Sciences: URBS 1316/SOCI 1316 (Human Geography) and PSYC 1300* or SOCI 1301* (both courses are recommended, but only one is required)

  Economics Concentration

  Economics: ECON 1311*, 1312*, 2320, 3122, 3325, 3326; one (1) course in the historical perspective (ECON 3343, 3344, 3345, or 3351); one (1) course in the international perspective (ECON 3318 or 3347); and one (1) course in the public policy perspective (ECON 3323, 3330, 3334, 3336, 3338, or 3356)
  History: HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History
  Political Science: PLSI 1303, 1331*; and one (1) of the following upper division courses: 3301, 3305, 3306, 3307, 3316
  Social Sciences: URBS 1316/SOCI 1316 (Human Geography) and PSYC 1300* or SOCI 1301* (both courses are recommended, but only one is required)

  Political Science Concentration

  Political Science: PLSI 1303, 1331*, 1341, 3345, 3361 or 3362*; and nine (9) hours from the following: 3301, 3303, 3304, 3305, 3306, 3307, 3313, 3314, 3316; 3351, 3352
  History: HIST 3376 and 3388, plus 1 course from U.S. History, 1 course from European History, and at least 1 course each from 3 of the following 4 fields: African History, Asian History, Latin American History, and Middle East History
  Economics: ECON 1311*, 1312*, 3122 [ECON 2320 and one (1) upper division economics course are recommended]
  Social Sciences: URBS 1316/SOCI 1316 (Human Geography) and PSYC 1300* or SOCI 1301* (both courses are recommended, but only one is required)

Spanish 6-12 Certification

- **Spanish Major**, including 3311 or 3312*

Speech 8-12 Certification

- **Speech Communication Major**, including SPCH 1333, 3330, 3360* or 3362, 3372*, 4350, 4-80

CERTIFICATION FOR ALL-LEVEL THEATRE ARTS and ART (Early Childhood - Grade 12)

I. The common curriculum

II. Education Course of Study

A. EDUC 1105 and 1106 recommended for first-year students.
B. Choose 2 courses from the following: EDUC 2201, 2202, 2203.

C. Choose 1 course from the following: EDUC 3301 or 3302 or 3303.
D. EDUC 3320*, 3331*, and 4100 are required. (EDUC 4100 fulfills the Senior Experience requirement of the University's Common Curriculum.)
E. CSCI 1303 or 1300 is required.

Theatre Arts EC-12 Certification

- **Drama Major**, including DRAM 1330, 2352 or 2356, 2354 and 3340
  In addition, SPCH 2313 is recommended, but not required.

Art EC-12 Certification

- **Art Major**, including ART 2320*; two (2) of the following courses: 3320, 3340, 3350, 3360, 3370

CERTIFICATION FOR ALL-LEVEL MUSIC (Age 3 - Grade 12)

Students pursue a major in music including courses for certification. Students will be certified to teach music to students age 3 to grade 12. Students should complete the following undergraduate requirements:

I. The common curriculum

II. Education Course of Study

A. 2 practicum courses are required (EDUC 2204, 2205).
B. EDUC 3320* is required.
C. CSCI 1303* is required.

III. Music major, including a minimum of 72 semester hours in music. Students may choose from a choral or an instrumental option.

Choral emphasis: 1000 (7 semesters), 1203, 1103, 1113, 1204, 1104, 1114, 2203, 2103, 2113, 2204, 2104, 2114, 3121, 3223, 3225, 3341, 3342, 4301; 18 credits of applied music in one area (14 of which must be at the level of 22-- or above); four (4) credits of applied music in a secondary area; 8 credits of large ensemble, 1161, 3162, 4321, 4361, 4363; and 1 credit of music electives.

Instrumental emphasis: 1000 (7 semesters), 1203, 1103, 1113, 1204, 1104, 1114, 2203, 2103, 2113, 2204, 2104, 2114, 3121, 3223, 3224, 3341, 3342, 4301; 18 credits of applied music in one area (14 of which must be at the level of 22-- or above); 1122 (or 1 credit of applied music in a secondary area); 8 credits of large ensemble, 1161, 2161, 2162, 2163, 2164, 4264, 4361, 4362; and 2 credits of music electives.

Elementary emphasis: 1000 (7 semesters), 1203, 1103, 1113, 1204, 1104, 1114, 2203, 2103, 2113, 2204, 2104, 2114, 3121, 3223, 3224 or 3225, 3341, 3342, 4301, 18 credits of applied music in one area (14 of which must be at the level of 22-- or above) and 4 credits of applied music in a secondary area, 8 credits of large ensemble, 1161, 3162, 4321, 4361, 4364, and 1 credit of music electives.

SUPPLEMENTAL CERTIFICATION FOR ENGLISH AS A SECOND LANGUAGE (ESL) AND SPECIAL EDUCATION

Students who want to pursue the optional Special Education Supplemental or ESL Supplemental Certificate will be certified to teach Special Education or ESL in the content area and grade levels of their primary, standard certificate.

A. Special Education

Students may add a supplemental certificate in Special Education by taking three (3) additional undergraduate courses (EDUC 3330, 3331*, 3332/3335) and specialized courses during the graduate year.

B. English as Second Language (ESL)

Students may add a supplemental certificate in English as a Second Language by completing the EC-6 Generalist Certification requirements or the 4-8, 8-12 English, Language Arts and Reading Certification requirements plus the following courses: LING 1300 and nine (9) semester hours from the following choices (ENGL 3346, SOCI 3331, LING 2310, INTL 4302/EDUC 4341, or PSYC 2330). Students may work with supervising faculty to arrange to earn independent study credit toward the nine required hours.

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

A. During the graduate year of study, students in general education will complete the following: EDUC 5339, 5350, 5351, 5352, 5360, 5661, and 5963.

B. During the graduate year of study, students pursuing a supplemental Special Education certificate will replace required general education courses with the following: EDUC 5399, 5636, 5962.

Those students seeking Certification 4-8/Dual

A. During the graduate year of study, students in general education will complete the following: EDUC 5339, 5350, 5351, 5352, 5360, 5681, and 5983.

B. During the graduate year of study, students pursuing a supplemental Special Education certificate will replace several required general education courses with the following: EDUC 5399, 5636, 5982.

Those students seeking Certification 8-12

A. During the graduate year of study, students in general education will complete the following: EDUC 5339, 5350, 5351, 5352, 5360, 5671, and 5973.

B. During the graduate year of study, students pursuing a supplemental Special Education certificate will replace several required general education courses with the following: EDUC 5399, 5636, 5972.

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, 5646, 5647, and 5948.

SCHOOL ADMINISTRATION

This program is designed to prepare candidates to assume responsibility as a principal or assistant principal of an elementary, middle, or secondary school, or as a central office mid-management administrator. Emphasis is given to practical management techniques and to the role of the administrator as an instructional leader. Candidates will pursue courses in school management, educational finance, and general leadership skills. Additionally, students study curriculum development, supervision of instruction, and educational research. The Master of Education degree in School Administration may be earned by completing 36 semester hours. Upon completion of coursework and the requisite certification exam, students will receive Texas' Standard Principal Certificate.

The course of study includes:

EDUC 5390	Educational Administration and Organization
EDUC 5391	School Management Functions
EDUC 5392	Administration of the Elementary and Secondary School
EDUC 5393	Research Methods - School Administration
EDUC 5394	Supervised Practicum - School Administration
EDUC 5395	Curriculum Development
EDUC 5396	Problems in Administration
EDUC 6390	School Law and Finance
EDUC 6391	Advanced Problems in Administration
EDUC 6393	Problems in Practice
EDUC 6693	Internship

SCHOOL PSYCHOLOGY

Trinity University offers a 60-semester hour specialist program in school psychology that is approved by the National Association of School Psychologists (NASP). The Master of Arts in School Psychology is awarded after completing 60 semester hours including two years of full-time study and a third-year internship.

The third-year internship (6 semester hours) consists of a minimum of 1200 clock-hour placement in a school setting. This full-time experience occurs over two consecutive semesters (Fall and Spring) and provides interns with opportunities for supervised work in assessment, counseling, consultation, and program evaluation.

Upon completing the 60-semester hour program, students are eligible for national certification by NASP. The Trinity University program meets the certification and licensure requirements by states that have adopted NASP standards such as Texas.

The course of study includes:

EDUC 5379	Psychological Assessment: Cognitive and Academic II
EDUC 5380	Biosocial Basis of Behavior and Emotion
EDUC 5381	Human Development and Learning
EDUC 5382	Psychological Assessment: Cognitive and Academic I
EDUC 5384	Behavior Management and Special Education
EDUC 5385	Research Methods I – Advanced Statistics
EDUC 5386	Psychological Assessment: Emotions and Personality
EDUC 5187	Emotional/Personality Assessment Lab
EDUC 5388	Neuropsychological Assessment and Remediation
EDUC 5389	Counseling Theory and Methods
EDUC 6380	Consultation Theory and Methods
EDUC 6381	Research Methods II: Design and Application
EDUC 6382	Group and Family Interventions
EDUC 6185	Developmental Assessment Lab
EDUC 6385	Developmental Assessment: Infants and Young Children
EDUC 6386	Supervised Practicum - School Psychology
EDUC 6387	Educational Planning for the Exceptional Student
EDUC 6183	Interventions Lab
EDUC 6384	School Psychology Practice
EDUC 5390	Educational Administration and Organization
EDUC 7380	School Psychology Internship: Part I
EDUC 7381	School Psychology Internship: Part II

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 2201 Practicum: EC-6
An introduction to the developmental needs of young children in conjunction with a field placement in one or more early childhood classrooms. Study will include learning and teaching in the preschool.

EDUC 2202 Practicum: Grades 4-8
An introduction to the unique developmental needs of young adolescents in conjunction with a field placement in one or more middle grades classrooms. Study will include students' cognitive, physical, social, and emotional changes and the implications for middle grades curriculum and instruction.

EDUC 2203 Practicum: Grades 8-12
An introduction to the developmental needs of young to late adolescents in conjunction with a field placement in one or more high school classrooms. Study will include learning and teaching in the high school.

EDUC 2204 Practicum: Music EC-6
An introduction to music in the preschool through the fourth grade in conjunction with a field placement in a pre-kindergarten or elementary music classroom.

EDUC 2205 Practicum: Music 5-12
An introduction to music in the middle schools and high schools in conjunction with a field placement in a middle or high school band, orchestra, or choral music program.

EDUC 2108 Seminar on the Child in Society
Each seminar session investigates an aspect of childhood: early childhood; elementary stage; secondary stage, including talented and gifted, handicapped, non-English speaking, and other exceptional conditions.

EDUC 3301 Field Seminar: EC-6
A study of literacy learning and instruction in the elementary school that integrates theory (seminars) and practice (field experiences).
Prerequisite: EDUC 2201.

EDUC 3302 Field Seminar: Grades 4-8
A study of the history, philosophy, organization, and curricula of middle grades schools in a field-based setting. Topics include programs and curricula that are culturally and developmentally responsive to young adolescent needs such as interdisciplinary teaming, advisory programs, flexible scheduling, activity programs, assessment, and parent/family collaboration and communication. This seminar also includes one or more field placements in a middle grades classroom.
Prerequisite: EDUC 2202.

EDUC 3303 Field Seminar: Grades 8-12
A study of teaching and learning in the high school that integrates theory (seminars) and practice (field experiences).

EDUC 3320 Growing up in America
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.

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
An introduction to the identification, assessment, and instruction of students who exhibit learning and behavior problems. This course includes a weekly three-hour practicum, where emphasis is placed on learning about strategies and specialized methods for instructing students with learning differences.

EDUC 3331 Survey of Special Education
An introduction to the causes, characteristics, strategies, trends, and issues in teaching students with learning, emotional, behavioral, communication, developmental, and physical disabilities. Identification, assessment, and planning for students with disabilities are discussed in the context of family involvement and cultural and linguistic diversity. This course includes a field placement working with students with disabilities in a range of educational and community settings.

EDUC 3332 Reading Difficulties with Diverse Populations
This course focuses on learning and reading theory, assessment, materials, and strategies for instructing diverse elementary school students with reading difficulties. On-site supervised experiences will focus on conducting assessments and development instructional plans for students. Credit may not be earned for both EDUC 3332 and 3335.

EDUC 3333 Positive Behavioral Supports for Students with Challenging Behaviors
An introduction to the principles of positive behavioral supports and their application to designing effective classrooms for students with challenging behaviors. This course includes a field placement where teachers will learn strategies to reduce behavior challenges of students with and without identified disabilities.

EDUC 3335 Reading Difficulties with Diverse Populations in the Middle School
This course focuses on learning about reading theory, assessment, materials, and strategies for instructing middle school students with reading difficulties. On-site supervised experiences will focus on conducting assessments and developing instructional plans for students. Credit may not be earned for both EDUC 3332 and 3335.

Prerequisite: EDUC 3331.

EDUC 4100 Senior Seminar
In this capstone course, students will integrate their experiences in the undergraduate course of study in education and the liberal arts and sciences. Individually and collectively, students from the EC-4, 4-8, and 8-12 certification levels will examine issues in education from multiple perspectives through seminars and discussions, inquiry and research, and the on-going development of a portfolio. Students will have the opportunity to work closely with a faculty member and peers to organize, integrate, and extend their knowledge of schooling in the United States. This course fulfills the Senior Experience requirement of the University's Common Curriculum.
Prerequisite: Senior standing.

EDUC 4338/5338 Teaching Reading in the Middle Grades
The study of literacy and learning in Grades 4-8 with an emphasis on the development of reading and writing processes as well as teaching reading in the content areas.

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.

EDUC 5181 Human Development and Learning Lab
Practice in the application of human development and learning theories. The lab project addresses a selected case study's theoretical developmental stage and the construction of an intervention from learning theories. Monitoring, graphing, and development conclusions will be conducted throughout the semester. Must be taken in conjunction with EDUC 5381.

EDUC 5183 Cognitive Academic Assessment Lab
Practice in the administration and scoring of mental abilities tests. Course must be taken in conjunction with EDUC 5382.

EDUC 5184 Behavior Management Intervention Laboratory
Supervised lab on writing Individualized Education Plans (IEP) and Behavior Management Plans for students with learning and emotional problems. The plans are developed based on actual cases that the student will observe and test.
This lab must be taken in conjunction with EDUC 5384.

EDUC 5187 Emotional/Personality Assessment Lab
This class consists of various exercises and activities designed to provide students with opportunities to practice scoring, formulate interpretive hypotheses, synthesize and integrate data from a variety of assessment measures, and prepare written reports. Must be taken in conjunction with EDUC 5386.

EDUC 5334 Curriculum Inquiry and Practice in Special Education
A study of the historical and recent curriculum development trends; the impact of national curriculum studies and movements; and current issues in curriculum planning and assessment as they relate to creating and modifying curricula for students with academic deficiencies.

EDUC 5335 Teaching Inquiry and Practice in Special Education
Presentation of curriculum and instructional approaches to teach special education and high-risk students. Study of methods, strategies, and materials to remotivate, reinforce, and instruct students with academic deficiencies in the least restrictive setting. Field placement required.

EDUC 5336 Clinical Practice in Special Education
Exploration of programming techniques appropriate for students with learning problems. Topics include interpretation of assessment as it relates to learning styles, individualization of instruction, classroom management, and interaction with teachers, administrators, and aides. On-site observation and participation. Fall semester.

EDUC 5337 Advanced Clinical Practice - Special Education
Demonstration of special education teaching methods and behavior management approaches in the classroom. Study of evaluation procedures to determine program and individual progress in special education and related services. Students will be assigned to a special education classroom for the student teaching experience.

EDUC 5339 Teaching Diverse Learners
An examination of current trends, issues, and influences in teaching and learning in regards to 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 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 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 5646.

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 5360 Pedagogics: Early Childhood-Grade 6
The study and application to teaching and learning of elementary school curriculum and methodology. Experiences in the university and the public schools are used to interpret, apply, and evaluate elementary school teaching and learning practices. Planning and teaching through various modalities and techniques is researched and developed to enhance individual teaching and learning styles.

EDUC 5362 Clinical Practice: Early Childhood-Grade 6
A supervised internship in elementary school sites where comprehensive experiences involving the school and community are provided. Students work with a team of professors, classroom teachers, and other school personnel to research, assess, and assimilate the teaching-learning process. These teams rotate through a variety of settings in the elementary schools. To be taken concurrently with EDUC 5336.

EDUC 5370 Pedagogics: Grades 4-8 and Grades 8-12
The study and application to teaching and learning of middle grades and secondary school curriculum and methodology. Experiences in the university and the public schools are used to interpret, apply, and evaluate grade-specific teaching and learning practices. Planning and teaching through various modalities and techniques are researched and developed to enhance individual teaching and learning styles at either the middle grades or secondary level.

EDUC 5372 Clinical Practice: Grades 8-12
A supervised internship in secondary school sites where comprehensive experiences involving the school and community are provided. Students work with a team of professors, classroom teachers, and other school personnel to research, assess, and assimilate the teaching-learning process. These teams rotate through a variety of settings in the secondary schools. To be taken concurrently with EDUC 5336.

EDUC 5379 Psychological Assessment: Cognitive and Academic II
The second course in the series addressing the assessment of student cognitive and academic functioning. Focus is on the analysis of data and conveying results in a meaningful report with relevant recommendations for the intended audience.
Prerequisite: EDUC 5382.

EDUC 5380 Biosocial Basis of Behavior and Emotion
A critical study of disorders of thought, behavior, and emotions throughout the lifespan. The impact of both social and biological factors on abnormal development are examined. The taxonomies to classify emotional and behavioral disorders are presented.

EDUC 5381 Human Development and Learning
A consideration of the major contribution of scientific research to an understanding of human development and learning. Emphasis on the biological, social, cultural, and psychological factors determining individual differences in children and adolescents. The major learning theories are studied in relation to their implications for teaching, and counseling and assessment.

EDUC 5382 Psychological Assessment: Cognitive and Academic I
The first in the two-course sequence in the assessment of cognitive and academic functioning. This course begins with a study of the theory of intelligence and achievement testing. Practice in administration, scoring, interpretation, and report writing using a variety of norm-referenced individual tests. Presentation of assessment strategies to assure reliable and valid appraisal of students from diverse cultural backgrounds.

EDUC 5383 Clinical Practice: Grades 4-8
A supervised internship in middle grades classrooms where comprehensive experiences are provided involving the school and community. Students work with a team of professors, teams of classroom teachers, and other school personnel to research, assess, and assimilate the teaching-learning process. To be taken concurrently with EDUC 5336 and 5670.

EDUC 5384 Behavior Management and Special Education
Study of behavior management systems that are based on psychodynamic, cognitive-behavioral, and developmental theoretical orientations. Specific intervention strategies are presented to reduce the behavioral and learning problems that interfere with achievement and psychosocial functioning.

EDUC 5385 Research Methods I – Advanced Statistics
This course, the first in the graduate research methods sequence, covers major statistical procedures and their associated knowledge paradigms, including: 1) descriptive and correlational statistics; 2) inferential statistics; 3) nonparametric statistics; and 4) univariate and multivariate procedures.

EDUC 5386 Psychological Assessment: Emotions and Personality
A study of test and interview-based assessment methods to assess psychosocial development. Focus on how diagnostic formulation is used to prepare comprehensive intervention plans. Intensive training in administration, scoring, and interpretation of projective personality tests. Must be taken in conjunction with EDUC 5187.

EDUC 5388 Neuropsychological Assessment and Remediation
A study of brain-behavior relationships and neuropsychologically-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.

EDUC 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.

EDUC 5390 Educational Administration and Organization
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.

EDUC 5391 The School Management Functions
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.

EDUC 5392 Administration of the Elementary and Secondary School
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.

EDUC 5393 Research Methods - School Administration
This course focuses on statistical and research methods underlying psychological and educational research and analysis including: 1) the philosophy of science underlying research; 2) ethical issues in research; 3) psychometrics; 4) a review of basic statistical procedures and concepts; 5) the use of the microcomputer in research and analysis; and 6) research report preparation.

EDUC 5394 Supervised Practicum - School Administration
Required for certification and/or licensure. Consists of supervised experiences in appropriate institutions and/or agency settings. Credit may vary. Open to a limited number of qualified students in Educational Administration. Practicum placement is in a multi-cultural setting.

EDUC 5395 Curriculum Development
An examination of modern curricular programs and instructional methodologies, analyzing philosophical backgrounds, purposes, and implications for implementation in schools. Studies include a major look at instructional needs, practices, new programs of instruction, how these programs operate at the elementary and secondary school levels, and how they are influenced by national and state entities.

EDUC 5396 Problems in Administration
Students are required to do in-depth reading in a variety of areas, make field trips to observe model programs in school administration, and conduct field studies.

EDUC 5397 Educational Leadership for Mid-Managers
Includes skills needed by administrators for successful leadership performance. Topics include effective communication, time management, coping with stress, motivation techniques, personal and group planning, leadership images, countering intimidation, human factors in administration, problem solving, and delegating. Emphasis is placed upon how to increase the performance of leadership personnel to benefit teachers, students, and the community.

EDUC 5398 School-Community Relations
Study and analysis of social agencies, power structure in communities; resistance to change, interpersonal and group relations, economic and multi-cultural characteristics as they may affect the school; development of criteria for effective school-community relations program. Prerequisite: Consent of instructor.

EDUC 5636 Clinical Practice in Special Education
Exploration of programming techniques appropriate for students with learning problems. Topics include interpretation of assessment as it relates to learning styles, individualization of instruction, classroom management, and interaction with teachers, administrators, and aides. Activities will include on-site observation and participation. Students will spend extended time in two different field placements.

EDUC 5646 Music Pedagogics
A field-based course dealing with music education in the elementary, middle, and high schools.

EDUC 5647 Clinical Practice in Music
A supervised internship in music education in the elementary, middle, and high schools.

EDUC 5661 Clinical Practice: Early Childhood-Grade 6
A supervised internship in elementary school sites where comprehensive experiences involving the school and community are provided. Students work with a team of professors, classroom teachers, and other school personnel to research, assess, and assimilate the teaching-learning process. These teams rotate through a variety of settings in the elementary schools.

EDUC 5664 Advanced Clinical Practice: Early Childhood-Grade 6
An internship in elementary school sites where students assume full responsibility for teaching and classroom management in an independent, but supervised, experience for a full semester. To be taken concurrently with EDUC 5337.

EDUC 5671 Clinical Practice: Grades 8-12
A supervised internship in secondary school sites where comprehensive practical experiences involving the school and community are provided. Students work with a team of professors, classroom teachers, and other school personnel to research, assess, and internalize the teaching-learning process. These teams rotate through a variety of settings in the secondary schools.

EDUC 5674 Advanced Clinical Practice: Grades 8-12
An internship in secondary school sites where students assume full responsibility for teaching and classroom management in an

independent, but supervised, experience for a full semester. To be taken concurrently with EDUC 5337.

EDUC 5681 Clinical Practice: Grades 4-8
A supervised internship in middle grades classrooms where comprehensive experiences are provided involving the school and community. Students work with a team of professors, teams of classroom teachers, and other school personnel to research, assess, and assimilate the teaching-learning process. To be taken concurrently with EDUC 5370.

EDUC 5684 Advanced Clinical Practice: Grades 4-8
An internship in middle grades schools where students assume full responsibility for curriculum, instruction, assessment, management, and parent/family collaboration in an independent but supervised experience for a full semester. To be taken concurrently with EDUC 5337.

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 5962 Clinical Practice: Early Childhood-Grade 6
A supervised internship in elementary school sites where comprehensive experience involving the school and community are provided. Students work with a team of professors, classroom teachers, and other school personnel to research, assess, and assimilate the teaching-learning process. These teams rotate through a variety of settings in the elementary schools.

EDUC 5963 Advanced Clinical Practice: Early Childhood-Grade 6
An internship in elementary school sites where students assume full responsibility for teaching and classroom management in an independent, but supervised, experience for a full semester.

EDUC 5972 Clinical Practice: Grades 8-12
A supervised internship in secondary school sites where comprehensive practical experiences involving the school and community are provided. Students work with a team of professors, classroom teachers, and other school personnel to research, assess, and assimilate the teaching-learning process. These teams rotate through a variety of settings in the secondary schools. Students will spend 50 additional hours of field work than students in EDUC 5661.

EDUC 5973 Advanced Clinical Practice: Grades 8-12
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 5982 Clinical Practice: Grades 4-8
A supervised internship in middle grades classrooms where comprehensive experiences are provided involving the school and community. Students work with a team of professors, classroom teachers, and other school personnel to research, assess, and assimilate the teaching-learning process. Students will spend an additional 50 hours of field work than students in EDUC 5661.

EDUC 5983 Advanced Clinical Practice: Grades 4-8
An internship in middle grades schools where students assume full responsibility for curriculum, instruction, assessment, management, and parent/family collaboration in an independent but supervised experience for a full semester.

EDUC 5-99 Problems in Education
A conference course in education. The student pursues independent research in the area in which he/she is concentrating. Credit can vary according to work prescribed. May be taken more than once provided content differs.
Prerequisite: Approval of advisor and instructor.

EDUC 6098 Thesis Renewal

EDUC 6099 Degree Requirements in Progress

EDUC 6183 Interventions Lab
Practice in group and family interventions. Must be taken in conjunction with EDUC 6382.

EDUC 6185 Developmental Assessment Lab
Practical experience in administering, scoring, and interpreting various instruments designed for the evaluation of cognitive, adaptive, social/emotional, language, and motor skills of young children will be provided. Preparation of informative written reports that include appropriate recommendations for early childhood interventions will be emphasized. This lab must be taken in conjunction with EDUC 6385.

EDUC 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.

EDUC 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.

EDUC 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.

EDUC 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.

EDUC 6385 Developmental Assessment: Infants and Young Children
Presentation of methods and theory in the developmental/psychoeducational assessment of infants and young children. Mastery of skills to administer and interpret psychological tests to identify cognitive, language, motor, adaptive, and socioemotional problems in the birth-5 age group (with an emphasis on children ages 3-5). Community/family/school collaboration and educational/behavioral interventions for young children will be discussed. Must be taken in conjunction with EDUC 6185.

EDUC 6386 Supervised Practicum - School Psychology
Required for certification and/or licensure. Consists of supervised experiences in appropriate institutions and/or agency settings. Credit may vary. Open to a limited number of qualified students in School Psychology. Practicum placement is in a multi-cultural setting.

EDUC 6387 Educational Planning for the Exceptional Student
Seminar and applied practice based upon state and federal education laws and their implementation in the school setting. Includes principles and methods to write psychoeducational evaluation reports, treatment plans, and individualized education plans (IEP). Lecture, case study, and field assignment.

EDUC 6390 School Law and Finance
Reviews legal bases for operating schools, methods of financing, and fiscal control. Includes sources of revenue for schools, funds management, taxation, and the laws governing school finance. Emphasis is placed upon school law dealing with student and teaching rights and liabilities, statute and case law relative to education, and knowledge of law essential to proper administration of schools.

EDUC 6391 Advanced Problems in Administration
Problem solving and inductive inquiry themed to live and persistent problems of administrative practice through case study and simulation.

EDUC 6392 Supervision and Evaluation of Teaching
Emphasis is on supervision as a means to improve teaching by promoting reflection, action research, and enhanced staff development. Students review the research on teaching and examine philosophical and moral issues. Clinical supervision, portfolio development, and other evaluation techniques are developed and practiced.

EDUC 6393 Problems in Practice
This course will help students to link theories of school leadership with actual administrative practice during their last semester of the two-year program, while they are immersed in their internship. In solving real and simulated problems, students will have the opportunity to practice and refine skills that they have begun to develop. Problems will be aligned to NCATE standards that require field experience so that students can document their solutions as evidence in their portfolios.

EDUC 6688, 6689 Thesis

EDUC 6693 Internship
Field work in school administration under the direction and supervision of both a public school administrator and a university staff member.

EDUC 7380 School Psychology Internship: Part I
Supervised internship in the practice of school psychology. Experience provides opportunities for counseling, assessment, and consultation in school systems and community agencies. (600 clock hours)

EDUC 7381 School Psychology Internship: Part II
Supervised internship in the practice of school psychology. Experience provides opportunities for counseling, assessment, and consultation in school systems and community agencies. (600 clock hours)

EDUC 7680 School Psychology Internship: Part I
Supervised internship in the practice of school psychology. Experience provides opportunities for counseling, assessment, and consultation in school systems and community agencies. (600 clock hours)

EDUC 7681 School Psychology Internship: Part II
Supervised internship in the practice of school psychology. Experience provides opportunities for counseling, assessment, and consultation in school systems and community agencies. (600 clock hours)

ENGINEERING SCIENCE

FARZAN AMINIAN, Ph.D., P.E., Professor
H. WILLIAM COLLINS, JR., Ph.D., Associate Professor
J. PAUL GIOLMA, Ph.D., P.E., Associate Professor; Chair
DIANA D. GLAWE, Ph.D., Associate Professor
PETER KELLY-ZION, Ph.D., Associate Professor
JACK LEIFER, Ph.D., Associate Professor
KEVIN M. NICKELS, Ph.D., Associate Professor
WILSON TERRELL, JR., Ph.D., Associate Professor
MAHBUB UDDIN, Ph.D., Professor

MISSION

The mission of the Engineering Science Department at Trinity University is to provide talented 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 program provides students with a demonstrated ability to practice engineering design and analysis, a broad background in the liberal arts and sciences, the ability to enter and advance in the field of engineering, effective oral and written communication skills, and the ability to pursue advanced studies.

The curriculum emphasizes an in-depth understanding of the fundamentals of the physical sciences, mathematics, and engineering science that form the foundation for technical work in all fields of engineering. Some specialization is available through elective courses in Chemical, Electrical, and Mechanical Engineering, taken during the junior and senior years. The program provides significant hands-on experience in engineering laboratories and participation in engineering design projects throughout the eight-semester engineering design course sequence. The emphasis on fundamentals is intended to prepare students for dealing with the rapid pace of technological change and the interdisciplinary demands of today's, and tomorrow's, engineering practice. The laboratory and design portions of the program provide the student with a balanced perspective of the realities and limitations required for practical problem solving.

The professional practice of engineering requires skill and resourcefulness in applying science and technology to the solution of problems in our complex technological society. The successful engineer must possess a thorough understanding of social and economic forces and have an appreciation of cultural and humanistic traditions. The Trinity Engineering Science Program encourages the development of this kind of graduate by providing a broad technical background and a significant liberal education in the humanities and social sciences.

ACCREDITATION

Trinity's undergraduate Engineering Science Program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

Admission to the Engineering Science Major

1. 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.
2. For full acceptance a student must ordinarily satisfy the following requirements:
   a) Completion of MATH 1311, 1312, and 2321 with an average of 2.0 or better.
   b) Completion of PHYS 1311/1111, 1312/1112 and CHEM 1318/1118 with an average of 2.0 or better.
   c) Completion of ENGR 1381, 1382, 1313, 2314, 2320/2120, and 2181 with an average of 2.0 or better.
   d) A grade of C or better in ENGR 1313, 2314, 2320/2120.
   e) Approval by the Department.
3. Provisional acceptance may be granted to applicants with up to 2 Ds in the courses listed in 2d).
4. After completing ENGR 2311, 2364/2164, 3355/3155, and 3327, the progress of provisional students will be reviewed. Upon recommendation of the Engineering Faculty and approval by the Department Chair, full acceptance will be granted.
5. Requests for exceptions to this policy will be considered by the Department.

BACHELOR OF SCIENCE IN ENGINEERING SCIENCE DEGREE

Engineering students normally follow programs of study specifically tailored to long term career objectives. Each program is composed of a combination of required and elective courses. The electives are chosen through required consultation with the engineering science advisor.

Requirements for the Bachelor of Science in Engineering Science degree are as follows:

I. The common curriculum. At least one upper division course or a two-course sequence, where the second course builds on the first course in the sequence, must be taken in Understanding Cultural Heritage or Understanding Arts and Literature or Understanding Human Social Interaction. This requirement is designed to provide depth as well as breadth in the humanities or the social sciences.

II. Engineering Science departmental requirements:

   A. ENGR 1313, 1381, 1382, 2181, 2182, 2311, 2314, 2320/2120, 2364/2164, 3181, 3182, 3323/3123, 3327, 3355/3155, 4326/4126, 4341,

4381, and 4382, totaling 51 semester hours.

B. MATH 1311, 1312, 2321, 3320, 3336, 3357; PHYS 1311/1111 and 1312/1112; CHEM 1318/1118 plus a basic science or math elective for a total of at least 33 semester hours.

C. ECON 1311, plus one ethics course: PHIL 1354 or RELI 1320.

D. Proficiency in the use of a modern programming language such as FORTRAN, Pascal, or C. Proficiency can be demonstrated by: (1) the completion of an appropriate college-level course (such as CSCI 1320), or (2) passing an examination given by the Department, or (3) by completion of an appropriate secondary school course (must be approved by Department Chair).

E. Completion of the Senior Experience: ENGR 4382.

III. Electives necessary to bring the total semester hours earned for the degree to 129.

FOUR-YEAR CLASS SCHEDULE

The suggested arrangement of courses for a four-year program leading to the degree of Bachelor of Science in Engineering Science should be determined in conference with the student's advisor. The recommended first-year program is shown below.

First Year

Fall Semester	Semester Hours	Spring Semester	Semester Hours
ENGR 1381	3	ENGR 1382	3
MATH 1311	3	ENGR 1313	3
PHYS 1311	3	MATH 1312	3
PHYS 1111	1	PHYS 1312	3
Common Curriculum	6	PHYS 1112	1
	16	Common Curriculum	3
			16

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, moments of inertia, and an introduction to virtual work.
Prerequisites: MATH 1311 and PHYS 1311.

ENGR 1381 Engineering Analysis and 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 and 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 alternative 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.
Corequisite: ENGR 2314.

ENGR 2182 Engineering Design IV
Continuation of ENGR 2181: final design, construction, testing, and evaluation. Engineering economics and life-cycle costs are introduced in support of the project. Multimedia presentations are required.
Prerequisite: ENGR 2181.

ENGR 2311 Mass and Energy Balances
Conservation of mass and energy concepts applied to open and closed systems with and without chemical reactions. Phase equilibria.
Prerequisite: CHEM 1318.

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.
Prerequisites: ENGR 1313 and 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 response and AC steady state.
Prerequisites: MATH 1312 and PHYS 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.
Prerequisite: CHEM 1318.

ENGR 2364 Electronics I
An introduction to the techniques of analysis, design, and understanding of elementary electronic devices and circuits. Modeling of linear and non-linear electronic devices and systems such as diodes, bipolar junction, and field effect transistors, operational amplifiers, and digital logic devices. Analysis and design of circuits using device and system models. An introduction to digital logic, including analysis and design techniques.
Prerequisite: ENGR 2320.
Corequisite: ENGR 2164.

ENGR 2164 Electronics I Laboratory
Laboratory course accompanying ENGR 2364. A continuation of the topics in ENGR 2120, with emphasis on electronic devices and systems. Experiments and design projects employing diodes, transistors, operational amplifiers, and combinational and sequential digital logic.
Corequisite: ENGR 2364.

ENGR 3181 Engineering Design V
Builds on the students' background in electrical engineering with emphasis on the design of a system that may employ circuits, electronics, electromagnetics, and controls. Supporting topics include safety, electrical measurements, component tolerances, specifications, performance standards, and manufacturability. An introduction to six-sigma concepts. Oral and written reports are required.
Prerequisites: ENGR 2364 and 2164.
Corequisite: MATH 3320.

ENGR 3182 Engineering Design VI
Builds on the students' background in thermodynamics/fluids with the introduction of a competitive thermal-fluids design project. Supporting topics include thermal-fluids instrumentation and measurements; and computerized data acquisition, analysis, and visualization. Application of uncertainty analysis and design of experiments. Introduction to deterministic vs. probabilistic design. Oral and written reports and design journals are required.
Corequisites: ENGR 3323 and 3123.

ENGR 3321 Signals and Systems
The analysis of signals and linear systems in the time and frequency domains using transform methods. Topics include: methods of modeling signals and systems, convolution, frequency response, impulse response, the Fourier and Laplace transforms, and transfer functions as applied to circuits and general linear systems.
Prerequisites: ENGR 2320 and MATH 3336.

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 with a strong emphasis on analysis and reporting of results.
Prerequisite: MATH 3320.
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, MATH 2321.

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 3350 The Institution of Engineering
An examination of the nature and function of the Institution of Engineering including its objectives, origin, evolution, structure, behavior, and role in society. Lectures complemented by student research and presentations highlight engineering influences on the development of civilization and on the nature of contemporary society.
Prerequisite: Junior standing.

ENGR 3355 Control Systems I
Techniques of modeling and analyzing mechanical and electrical systems, linear systems including feedback control systems, solutions to system differential equations using classical techniques, both analytical using the Laplace transform, and numerical methods; transfer functions, transient and steady-state response, stability, and frequency response.
Prerequisites: ENGR 2364, MATH 3336.

Corequisite: ENGR 3155.

ENGR 3155 Control Systems I Laboratory
Experimental observation of the behavior of physical systems and comparison with the mathematical models. Construction and analysis of simple control systems with examples taken from the thermal, fluid, mechanical, and electrical sciences.
Corequisite: ENGR 3355.

ENGR 4326 Heat Transfer
A study of conduction, convection, and radiation separately and in combination; steady and unsteady states; analytical and numerical methods including explicit and implicit finite differences.
Prerequisites: ENGR 3323, MATH 3357.
Corequisite: ENGR 4126.

ENGR 4126 Heat Transfer Laboratory
Experiments in heat transfer emphasizing design of thermal-fluid systems.
Prerequisite: MATH 3320.
Corequisite: ENGR 4326.

ENGR 4341 Engineering Materials
Principles underlying the structure-property-application relationships of various engineering materials including metals, ceramics, glasses, polymers, composites, semiconductors, and superconductors. Analysis of material microstructures with respect to thermal, mechanical, electrical, optical, magnetic, and chemical properties. The role of material selection in engineering design. Laboratory work includes material testing, uses of x-ray diffractometer and the electron scanning microscope. Supplemental of x-ray diffractometer and the electron scanning microscope. Supplemental movies on advances in engineering materials. Individual project.

ENGR 4342 Bioengineering Science
Structure, function, and modeling of transport systems in the human body with emphasis on cardiovascular, pulmonary, and related systems. Mathematical modeling and system responses to environmental changes. Homeostasis and control systems.
Prerequisites: CHEM 1318 and MATH 1311.

ENGR 4356 Modern Control System Design
Selected topics from the broad range of modern methods of control system analysis and design, such as: state-space and modern transfer function models and methods; discrete-time and/or nonlinear systems; multivariable systems; computer-aided control system design.

ENGR 4357 Chemical Reaction Engineering
Chemical reaction kinetics and its relationship to the design and scale-up of chemical reactors. Mathematical analysis of batch, mixed flow and plug flow reactors, advanced topics including multireaction analysis, heat and mass transfer in chemical reactors and catalytic reactors. Computer simulation.
Prerequisites: CHEM 1318, ENGR 2311.

ENGR 4358 Biochemical Engineering
The fundamentals of analysis and design of bioprocesses. Topics include enzyme kinetics, immobilized enzyme reactors, cell cultivation, growth kinetics, and bioreactor design.
Prerequisite: ENGR 2311.

ENGR 4365 Digital Logic Design
A comprehensive study of digital logic design and analysis techniques for combinational and sequential circuits. Builds on the introduction given in ENGR 2364. 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 a complex sequential circuit such as a microprocessor.
Prerequisite: ENGR 2364.

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 small- and medium-scale integrated circuit building blocks as well as 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.
Prerequisites: ENGR 2311 and MATH 3336.

ENGR 4367 Mechatronics
This course surveys topics underlying the design of mechatronic systems such as electronics, system modeling and control, and computer control of systems. Components supporting system design such as sensors, actuators, and data acquisition are also covered. Case studies of mechatronic systems, including discussion of tradeoffs between mechanical, electrical, electronic, and microcomputer control, are studied. A final project involving the design and implementation of a mechatronic system puts these principles into practice.
Prerequisites: ENGR 2314, 2364, and 3355.

ENGR 4368 Applications of Signal and System Theory
Variable topics course, with topics determined by the interests of the instructor and students. Topics may include: communication theory (Fourier Transforms, stochastic processes and communication systems), discrete time signals and systems (z transform, discrete convolution and the discrete Fourier Transform), or digital signal processing (digital filters, the Fast Fourier Transform and applications).
Prerequisite: ENGR 3321.

ENGR 4369 Embedded Microcomputer Systems
Study of microprocessor and microcontroller systems: hardware, including basic system architectures, processors, memory, and peripheral devices; software, including assembly language programming; and system design, including electrical and mechanical applications. Hands-on experience in a typical development environment, including interfacing and programming. Includes a case study of a typical embedded system.
Prerequisite: ENGR 2364.

ENGR 4370 Mechanics of Continuous Media
Mechanics of solids including elasticity, plasticity, advanced strength of materials, energy methods, experimental stress analysis, and an introduction to the finite element method.
Prerequisite: ENGR 3339.

ENGR 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: ENGR 4326.

ENGR 4373 Thermal/Fluid Applications
This course covers advanced topics in fluid mechanics, heat transfer, and thermodynamics. Applications in which the interdependence of these fields is critical to the understanding of engineering systems will be emphasized.
Prerequisite: ENGR 3327.

ENGR 4375 Structural Dynamics
Free and forced vibrations of single and multiple degree of freedom systems with and without damping, structural response to dynamic loads, eigenvalue problems, energy methods, differential equation methods, forcing functions, and numerical analysis.
Prerequisites: ENGR 2314 and MATH 3336.

ENGR 4377 Electronics II
Analysis and design of digital electronic circuits using MOS transistors; analysis and design of operational amplifiers; feedback amplifiers and frequency response of amplifiers.
Prerequisite: ENGR 2364.

ENGR 4177 Electronics II Laboratory
Laboratory to accompany ENGR 4377. Computer-aided design of integrated circuits and verification of design using simulation and/or laboratory experimentation.
Corequisite: ENGR 4377.

ENGR 4381 Engineering Design VII
A capstone design experience with small groups of students, each group advised by a designated faculty member. Includes the establishment of objectives and criteria, modeling, analysis and synthesis, and aesthetics for the preliminary design stages of each group's project. Projects will involve realistic design constraints such as ethics, health and safety, manufacturability, sustainability, economics, the environment, and social and political issues. Oral and written reports and design journals are required.
Prerequisite: Consent of Department Chair.

ENGR 4382 Engineering Design VIII
The capstone experience continued, including final design, construction, testing, and evaluation of the projects started in ENGR 4381. Oral and written reports and design journals are required.
Prerequisite: ENGR 4381 or consent of Department Chair.

ENGR 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 the 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 Department Chair.

ENGR 3-90 Directed Research
Individual research conducted under faculty supervision. Oral and written communication of results is required, including an end-of-semester written report. Credit may vary from 1 to 3 hours. The course may be repeated for additional credit.
Prerequisites: Consent of instructor and the Department Chair.

ENGR 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.

ENGLISH

VICTORIA AARONS, Ph.D., Professor; Chair
PETER H. BALBERT, Ph.D., Professor
JOHN R. BRAZIL, Ph.D., Professor; President
JENNY BROWNE, M.F.A., Assistant Professor
DUANE COLTHARP, Ph.D., Associate Professor; Associate Vice President for Academic Affairs
MICHAEL FISCHER, Ph.D., Professor; Vice President for Academic Affairs and Dean of the Faculty
JUDITH L. FISHER, Ph.D., Professor
ANGELA FLORSCHUETZ, Ph.D., Assistant Professor
COLEEN GRISSOM, Ph.D., Professor
ANDREW PORTER, M.F.A., Assistant Professor
DAVID RANDO, Ph.D., Assistant Professor
JEFFREY RUFO, Ph.D.*, Assistant Professor
WILLIS A. SALOMON, Ph.D., Associate Professor
KRUPA SHANDILYA, Ph.D.*, Assistant Professor
NORMAN SHERRY, Ph.D., O.R. and Eva Mitchell Distinguished Professor of Literature
MICHAEL SOTO, Ph.D., Associate Professor
CLAUDIA STOKES, Ph.D., Associate Professor
BETSY TONTIPLAPHOL, Ph.D., Assistant Professor

THE MAJOR

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

I. The common curriculum

II. Departmental requirements:

A. Thirty-nine (39) hours in the Department of English

B. Lower-division requirements:

At least fifteen (15) hours of lower-division courses including:

ENGL 2301	British Literature: Epic to Romantic
ENGL 2302	British Literature: Romanticism and After
ENGL 2303	American Literature: Colonization to 1900
ENGL 2304	American Literature: New Realism Through the Moderns
ENGL 2311	Literary Methods Required of all English majors and must be completed by the end of the fifth semester; limited to majors, minors, and prospective majors.

C. Upper-division requirements:

At least twenty-one (21) hours of upper-division courses, including:

1. Three (3) hours of Shakespeare (ENGL 3360 or 3361);

2. Six (6) hours of literary periods to 1660 excluding ENGL 3360 and 3361: 3355, 3356, 3357, 3358, 3359, 3362, 3363, 4301, 4302, 4303, 4320, or other appropriate courses.
3. Six (6) hours of literary periods from 1660 to 1900, three (3) in American Literature and three (3) in British Literature.
   a. American literature courses include 3370, 3371. Other courses, when appropriate, may satisfy this requirement.
   b. British literature courses include 3364, 3365, 3366, 4304, 4321, 4322. Other courses, when appropriate, may satisfy this requirement.

4. Six (6) hours in 20th century or contemporary literature: ENGL 3320, 3321, 3325, 3327, 3329, 3367, 3368, 3372, 3373, 3375, 3380, 3381, 3383, 3385, 3387, or other appropriate courses.

D. Completion of the Senior Experience: a senior experience paper in any 4000-level course offered by the English Department (requires permission of the instructor and simultaneous enrollment in ENGL 4001); or ENGL 4398: Senior Thesis II.

E. Another three (3) hours must be taken from either lower- or upper-division courses.

THE MINOR

A minor in English consists of a minimum of 21 semester hours of English above ENGL 1302, of which at least 12 semester hours must be upper-division.

THE MINOR IN CREATIVE WRITING

The minor in Creative Writing is designed for the student who wishes to pursue an emphasis in creative writing to complement a major in another area.

The requirements for the minor are as follows:

I. Twelve (12) hours in creative writing including:

ENGL 3302 Fiction Writing
ENGL 3303 Poetry Writing
ENGL 3312 Advanced Fiction Writing
ENGL 3313 Advanced Poetry Writing

II. Six (6) additional hours from the following:

COMM 3340 Media Writing: Magazine Writing
COMM 3340 Media Writing: Scriptwriting
DRAM 3360 Playwriting
ENGL 3316 Writing Internship
ENGL 3327 Contemporary Literature
ENGL 3335 Rhetorical Analysis
ENGL 3375 Postmodern Literature
ENGL 4305 Topics in Creative Writing
ENGL 4323 Studies in American Literature: The American Short Story

* 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.

THE SENIOR THESIS AND HONORS PROGRAM

The senior thesis may be either a substantial piece of creative writing or an in-depth, original, analytical argument of approximately 40 pages, using primary and secondary research. The 6-hour thesis program (ENGL 4398 and 4399) may be chosen by any student with the consent of an appropriate instructor, and it is required of all students wishing to graduate with departmental Honors.

A student wishing to graduate with Honors in English must do all of the following:

1. Maintain an overall grade point average of at least 3.33.
2. Maintain a grade point average of at least 3.5 in English.
3. 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 advisor.
4. Complete ENGL 4398 and 4399 with a grade of "A."
5. Declare his or her intention to be considered for Honors by submitting a written application to the chair of the department, along with a formal recommendation from the thesis advisor.
6. Submit a completed draft of the senior thesis to the thesis advisor and to a second faculty reader approved by the departmental Honors committee.
7. Submit the completed senior thesis to the departmental Honors committee, along with formal recommendations from the thesis advisor and second reader.
8. Make an oral presentation of the senior thesis to the department.

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

A full description of the Honors program is available in the English department office.

COURSES

ENGL 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 ARTH 1301, COMM 1302, and FILM 1301.)

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
A writing course emphasizing exposition and argument for students who have exempted from 1302 and who elect to take a lower-division writing course beyond 1302.
Prerequisite: Consent of instructor.

ENGL 1305 Introduction to Comparative Literature
Examines with a cross-cultural perspective texts from around the world. The course provides an introduction to the interdisciplinary field of comparative literature. (Also listed as CMLT 1300.)

ENGL 2300 International Cinema
This course focuses on the cultural and critical analysis of international films as an expression of particular artistic genres and/or styles within specific historical, ideological, and cultural contexts. Films selected have achieved wide, critical acclaim; others reveal unique and important visions of human experience; while still others are selected for their political, ideological, or sociological significance. Students

should develop an awareness that the medium of film has a history and that its history is not confined to national boundaries. (Also listed as ARTH 2301, COMM 2301, FILM 2301, and ML&L 2301.)

ENGL 2301 British Literature: Epic to Romantic
An examination of the literary perspectives of cultural changes in English from the early medieval period to the beginnings of Romanticism.

ENGL 2302 British Literature: Romanticism and After
An examination of the literary expressions of cultural changes from the French Revolution through the mid-20th century, with a primary concentration on British writers, although other writers and texts may be used to broaden the course's perspective.

ENGL 2303 American Literature: Colonization to 1900
An examination of the literary expressions of cultural changes in America from the early explorers and colonists through the end of the nineteenth century.

ENGL 2304 American Literature: New Realism Through the Moderns
An examination of the literary expressions of cultural changes in America from 1900. Special attention is paid to the relation between the new spirit of America after the first World War and the resultant formal and thematic adaptations in literature.

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 Medieval Imagination
Study of primary works of imaginative cosmology produced during the Middle Ages, with emphasis upon ways in which humanity's place in time and the cosmos are portrayed; attention to historical, cultural, theological, and aesthetic backgrounds. Authors of such works include Boethius, Augustine of Hippo, Rabbi Moses Ben Maimon (Maimonides), Thomas Aquinas, the builders of Chartres Cathedral, Dante Alighieri, and Geoffrey Chaucer.

ENGL 2310 Introduction to the Study of Language
An introduction to language and communication systems across species. The introductory part of the course covers the major studies about animal communication systems. The main part of the course introduces the study of various human languages in both historical and descriptive terms. The structures of languages such as English, Spanish, Chinese, and Japanese are analyzed. The last part of the course introduces human language systems such as nonverbal systems, sign languages and/or computer languages. (Also listed as LING 2310 and SPCH 2310).

ENGL 2311 Literary Methods
Introduction to the practice of literary studies. Special attention will be paid to evaluating and interpreting both primary literature (in its major genres) and a variety of secondary critical arguments. Frequent writing assignments will include a major essay that demonstrates an awareness of important critical work on the subject. Topics vary.

ENGL 2340 Creative Thinking and the Artistic Process
This course encourages students to synthesize a theoretical and experiential approach to the creative process as studied through the visual arts, music, creative writing, and theatre. Students enter into the creative process as a means to develop creative self-expression, aesthetic sensibility, and an understanding of the arts. The nature and drive of artistic endeavor is explored through studies of the lives of significant thinkers and artists, examination 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, DRAM 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 3301 American Drama
Study of trends in American dramatic literature from the 17th century through World War II. Topics include frontier theater, suffragette pageants, regional repertory theater, Vaudeville, and Broadway. (Also listed as DRAM 3334.)
Prerequisite: DRAM 1314 or consent of instructor.

ENGL 3302 Fiction Writing
Study in the forms of fiction with a primary focus on writing the short story.

ENGL 3303 Poetry Writing
Study of the theory, techniques, and practice of poetry writing.

ENGL 3304 Writing Tutors/Writing Workshop
Writing tutors assigned by permission of instructor to individual sections of ENGL 1302. At the discretion of the instructor, tutors assist students in the process of producing written essays. Office hours and class attendance required.
Prerequisite: Consent of instructor.

ENGL 3305 Culture and Creativity in the Middle Ages and Renaissance
A course focusing on the interrelation of art, music, literature, and history at significant moments in the Middle Ages and Renaissance. The goal is to make it possible for students to draw new connections between the areas of culture dealt with in the course. The syllabus may include such important cultural figures and works as Charlemagne, Gregorian chant, *The Song of Roland*, Thomas Aquinas, motets, Michaelangelo, and Shakespeare. The course will combine lectures with detailed work in discussion sections. (Also listed as ARTH 3338, MDRS 3301, and MUSC 3351.)

ENGL 3312 Advanced Fiction Writing
Extensive writing in forms and techniques of fiction. May be repeated for up to 6 hours credit with permission of instructor.
Prerequisites: ENGL 3302 and consent of instructor.

ENGL 3313 Advanced Poetry Writing

Extensive writing in forms and techniques of poetry. May be repeated for up to 6 hours credit with permission of the instructor.
Prerequisites: ENGL 3303 and consent of instructor.

ENGL 3314 Advanced Exposition and Argument
Intensive writing workshop concentrating on individual projects and focusing on the traditional rhetorical principles of invention, structure, and style.
Prerequisite: ENGL 1302 or equivalent or consent of instructor.

ENGL 3315 Advanced Writing for the Professions
Intensive writing workshop concentrating on individual writing concerns with relation to specific professions. Focus on audience, structure, and professional expectations.

ENGL 3316 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.
Prerequisite: Consent of instructor.

ENGL 3320 Modern Drama
Study of trends in dramatic literature from Realism to the present. (Also listed as DRAM 3336.)

ENGL 3321 Contemporary Drama
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. (Also listed as DRAM 3337.)

ENGL 3322 Greek and Roman Drama
Study of trends in Greek and Roman dramatic literature, with attention to social, cultural, and political contexts. Topics will include the development of dramatic conventions and traditions of reception and performance. (Also listed as CLAS 3303 and DRAM 3335.)
Prerequisite: Sophomore standing or consent of instructor.

ENGL 3326 Literature and Women's Studies
Analysis of the development and movements of writing by and about women.

ENGL 3327 Contemporary Literature
Selected studies in contemporary prose fiction, primarily American and Canadian short stories and novels. May be repeated for up to 6 hours when topics vary.

ENGL 3329 Jewish Literature
A survey of Jewish writers, including Kafka, Babel, Singer, Sholem Aleichem, Roth, Bellow, Malamud, Paley, and Wiesel, in response to Jewish literary and cultural traditions, rooted in Hebrew scripture.
Prerequisite: 6 hours of English above 1302.

ENGL 3330 Literature and the Visual Arts
A study of the theoretical, formal, and substantive interrelation between literature and the visual arts (painting, sculpture, and architecture). Topics will apply basic aesthetic and historical analysis to specific movements such as Modernism or specific periods such as English Romanticism. Topics will vary and the course may be repeated for up to six hours of credit.

ENGL 3334 Rhetorical Criticism
Examines approaches to the critical analysis of rhetorical discourse with emphasis on methodological issues as well as techniques for doing scholarly criticism. (Also listed as SPCH 3350.)

ENGL 3335 Rhetorical Analysis
Introduction to rhetoric as a mode of analysis as it applies to discursive modes and genres. (Also listed as SPCH 3352.)
Prerequisite: 6 hours of English above 1302.

ENGL 3337 Literary Theory
A survey of trends in recent literary and cultural theory, such as feminism, new historicism, marxism, deconstruction, postcolonialism, and psychoanalysis, in relation to philosophical backgrounds and interpretive practice.
Prerequisite: ENGL 2311 or consent of instructor.

ENGL 3338 Ideology
An examination of the influence of ideological critique on literary and cultural studies, especially in recent work on race, class, gender, and postcolonialism.
Prerequisite: ENGL 2311 or consent of instructor.

ENGL 3339 Philosophy of Literature
In this course we will investigate several philosophical issues raised by literature, such as what exactly literature is, the nature of literary authorship and interpretation, why it is we respond emotionally to fictional characters, and what the value of engaging with literature is. (Also listed as PHIL 3360.)
Prerequisite: PHIL 1301 or six hours of credit in English.

ENGL 3345 Structure of English
An introduction to the linguistic structures of English and of human language in general. The course includes phonology, word formation, sentence structure, and vocabulary development, as well as a brief introduction to dialects, the social dimensions of language, literary stylistics and other topics related to language usage. The course also includes an overview of the major approaches to the study of human languages and of the major scholars in the field.

ENGL 3346 History of the English Language
Traces the history of modern English varieties of language from their common Indo-European origin. Emphasis upon the relation between cultural changes and
changes in English vocabulary, grammar, pronunciation, and spelling.
Prerequisite: 6 hours of English above 1302.

ENGL 3347 Sociolinguistics
An introduction to linguistic theories of language change. Emphasis on linguistic analysis of languages in change. (Also listed as SOCI 3330 and ANTH 3330.)

ENGL 3349 Language Acquisition and Development
A study of the developmental stages in the acquisition of English: phonology, syntax, and vocabulary. Monolingual, bilingual, and phonological patterns of acquisition are included.

ENGL 3350 Language Structures
Contrastive analysis of standard English and other languages including Spanish, French, Japanese, Vietnamese or other major language with consent of instructor. Study of the effect for a non-English speaker of the acquisition and development of English phonology, word formation, vocabulary and syntax. Especially designed for teachers of a foreign language, of a second dialect of English, and of bilingual education.

ENGL 3351 ESL, ESD, and TEFL
This methods course introduces theories and methods of teaching English as a Second Language (ESL), and English as a Second Dialect (ESD) to residents of the United States, and of Teaching English as a Foreign Language (TEFL) in other nations.

ENGL 3355 Introduction to Old and Middle English Philology
A philological survey of the medieval stages of the development of the English language, as well as an overview of the English literature of this period, with special emphasis on Old English prose texts and some major examples of Middle English poetry.
Prerequisite: 6 hours of English above 1302 or consent of instructor.

ENGL 3356 Readings in Old English Literature
A survey of the major genres of Old English literature in their cultural context: heroic poetry, elegies, Biblical narratives, riddles, the saint's life, homilies, and theological tractates.
Prerequisite: ENGL 2301, 3355 or consent of instructor.

ENGL 3357 English Literature of the Late 14th Century
A survey of the works of major authors in late medieval England: Geoffrey Chaucer, the Gawain poet, William Langland, John Gower, Sir Thomas Malory, as well as the anonymous authors of some of the moralities and mystery plays.
Prerequisite: ENGL 2301, 3355 or consent of instructor.

ENGL 3358 Medieval and Early Renaissance Drama
A study of English drama from the liturgical beginnings through Christopher Marlowe. Within a rich historical, Biblical, cultural, and aesthetic context, the course emphasizes the quem quaeritis trope, miracles, mysteries, moralities, interludes, and tragedies.
Prerequisite: ENGL 2301 or consent of instructor.

ENGL 3359 Medieval Literature
Study of literature from the European Middle Ages, which may include such areas as prose, poetry, drama, and historical background. May be repeated for up to six hours when topics vary.
Prerequisite: ENGL 2301 or consent of instructor.

ENGL 3360 Shakespeare
An introduction to Shakespeare's plays with special attention to genre, periodization, and topical issues that situate Shakespeare's plays within their cultural contexts. Topics will vary and the course may be repeated for up to six hours of credit when topics vary..
Prerequisite: ENGL 2301 or consent of instructor.

ENGL 3362 Early Modern British Literature, 1485-1603
A survey of poetry and prose from More to Shakespeare, roughly corresponding to the consolidation of the Tudor monarchy and emphasizing the discursive, political, and cultural contexts of emergent English Renaissance literary production.
Prerequisite: ENGL 2301 or consent of instructor.

ENGL 3363 Early Modern British Literature, 1603-1660
A survey of poetry and prose from Donne to Marvell, emphasizing the effects of monarchical succession, emergent capitalism, colonialism, scientism, religious controversy, and revolutionary conflict on British literature of the earlier seventeenth century.
Prerequisite: ENGL 2301 or consent of instructor.

ENGL 3364 British Literature, 1660-1798
A study of poetry, prose, and drama from the Restoration through the eighteenth century, emphasizing the flourishing of satire, the rise of the novel, the emergence of sentiment, and the increasing literary activities of women.
Prerequisite: ENGL 2301 or consent of instructor.

ENGL 3365 19th-Century British Poetry
Study of selected poetry from nineteenth-century England. Emphasis on major poets and movements from the Romantics, the Victorians, or the Edwardians.
Prerequisite: ENGL 2302 or consent of instructor.

ENGL 3366 19th-Century British Fiction
Study of selected fiction from nineteenth-century Britain. Emphasis on major authors and movements from the Romantics, the Victorians, or Edwardians. May be repeated when topics vary.
Prerequisite: ENGL 2302 or consent of instructor.

ENGL 3367 British Literature, 1900-Present
Studies in major British writers and literary movements. May be repeated when topics vary.
Prerequisite: ENGL 2302 or consent of instructor.

ENGL 3370 Early American Literature
Examines the literature of the colonies and early republic, up to 1830. Considers literature in the light of Puritan and Enlightenment attempts to build a nation as well as the social conflicts that undermined those projects.

Prerequisite: ENGL 2303 or consent of instructor.

ENGL 3371 American Literature of the 19th Century
Study of particular periods, literary movements, authors, themes, or genres.
Prerequisite: ENGL 2303 or consent of instructor.

ENGL 3372 American Literature, 1900-Present
Studies in major American writers and literary movements. May be repeated when topics vary.
Prerequisite: ENGL 2304 or consent of instructor.

ENGL 3375 Postmodern Literature
Major authors and issues involved with the postmodern aesthetic.
Prerequisite: ENGL 2302, 2304 or consent of instructor.

ENGL 3380 The Modern Novel
Study of the influence of the changing concepts of time, space, and personality on the British and American novel after 1915. Works by Joyce, Woolf, Lawrence, Hemingway, Faulkner, and others.
Prerequisite: ENGL 2302, 2304 or consent of instructor.

ENGL 3381 Modern Poetry
Examines the major figures and movements of poetry written in English during the twentieth century.
Prerequisite: ENGL 2302, 2304 or consent of instructor.

ENGL 3382 The Lyric
Examines interpretive strategies suggested or suppressed by traits in the lyric genre. Lyric poetic practice will be studied at various periods in English literary history.
Prerequisite: ENGL 2301 or consent of instructor.

ENGL 3383 The British Novel
Study of the development of the novel from Defoe through the twentieth century.
Prerequisite: ENGL 2301, 2302 or consent of instructor.

ENGL 3384 The American Novel
Evolution of the American novel in its historical and cultural setting.
Prerequisite: ENGL 2303, 2304 or consent of instructor.

ENGL 3385 The Continental Novel
Study of a selection of novels in translation from French, Russian, and German literatures. Includes Balzac, Hugo, Dostoevsky, Koestler, Hesse, and Böll.
Prerequisite: ENGL 2302, 2304, 2305 or consent of instructor.

ENGL 3386 Theory of the Novel
Evolution of the novel from its roots in the seventeenth and eighteenth centuries to its modern flowering in the twentieth. Includes Fielding, Austen, Eliot, Dickens, Hardy, Conrad, James, Woolf, and Faulkner.
Prerequisite: ENGL 2311 or consent of instructor.

ENGL 3387 Politics and the Novel
The course will explore dilemmas of power and ethics, freedom and authority, oppression and resistance, through the eyes of the great writers of this century. Equal weight will be given to the literary and political contents of the works.
Prerequisite: ENGL 2302, 2304 or consent of instructor.

ENGL 3-90 Directed Studies - Junior Level
Independent study. Discretion of instructor.
Prerequisite: Consent of instructor.

ENGL 4001 The Senior Experience
English majors may satisfy the Senior Experience requirement by enrolling in this course in conjunction with another 4000-level English course. The instructor will define an appropriately ambitious research project as the Senior Experience component of the course. This is a pass/fail, no-credit course.
Prerequisite: Senior standing and consent of instructor.

ENGL 4301 Geoffrey Chaucer
Examines Chaucer's poetry, emphasizing in separate semesters either the dream poetry and the Troilus, or The Canterbury Tales.
Prerequisite: ENGL 2301, 3355 or consent of instructor.

ENGL 4302 Elizabethan and Jacobean Playwrights
Non-Shakespearean drama from the opening of professional theaters (1576) until the closing under Cromwell (1642). Includes Kyd, Marlowe, Jonson, Webster, Middleton, and Rowley, Beaumont and Fletcher, and Ford. Works studied in relation to social and theatrical conditions and contemporary literary criticism.
Prerequisite: ENGL 2301 or consent of instructor.

ENGL 4303 Milton
Examines Milton's major poetry and prose in historical, theological, and political contexts.
Prerequisite: ENGL 2301 or consent of instructor.

ENGL 4304 Restoration Drama
Examines English drama from 1660 to 1800. Covers heroic drama, tragedy, comedy, and satire.
Prerequisite: ENGL 2301 or consent of instructor.

ENGL 4305 Topics in Creative Writing
Extensive writing in a specific form or genre. May be repeated once when topics vary.

Prerequisite: ENGL 3302 or consent of instructor.

ENGL 4320 Studies in Early Modern British Literature
Selected topics concerning the intersection of literature and culture in sixteenth and earlier seventeenth-century England in the context of current critical theory and debate. May be repeated when topics vary.
Prerequisite: ENGL 2301 or consent of instructor.

ENGL 4321 Studies in 18th-Century British Literature
A study of selected topics in the literature and culture of Restoration and eighteenth-century Britain in the context of current critical theory and debate. May be repeated when topics vary.
Prerequisite: ENGL 2301 or consent of instructor.

ENGL 4322 Studies in 19th-Century British Literature
Study of the literature, literary movements, history, and criticism of nineteenth-century England. Topics vary from the Romantics to the Victorians to the Edwardians. May be repeated when topics vary.
Prerequisite: ENGL 2302 or consent of instructor.

ENGL 4323 Studies in American Literature
Course examines selected topics, genres, and cultural issues of American literature. Includes the Harlem Renaissance; Theory and Practice of American Gothic. May be repeated when topics vary.
Prerequisite: Appropriate survey or consent of instructor.

ENGL 4324 American Poetry
Examines major American poetry from Whitman to the present.
Prerequisite: ENGL 2303, 2304 or consent of instructor.

ENGL 4325 Seminars in Literary Periods
Examines issues and authors within their specific historical periods. May be repeated when topics vary.
Prerequisites: Appropriate survey and ENGL 2311 or consent of instructor.

ENGL 4326 Seminars on Individual Authors
In-depth study of one or more major figures. May be repeated when authors vary.
Prerequisites: Appropriate survey and ENGL 2311 or consent of instructor.

ENGL 4327 Literature of the Holocaust
Examines cultural, generational, and literary perspectives of the Holocaust.
Prerequisite: ENGL 2311or consent of instructor.

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 other theoretical approaches both as discursive practice and in relation to literary canons and traditions. May be repeated when topics vary.
Prerequisite: ENGL 2311 or consent of instructor.

ENGL 4-90 Directed Studies - Senior Level
Independent study. Discretion of instructor.
Prerequisite: Consent of instructor.

ENGL 4398 Senior Thesis I
Individual research and scholarly investigation under faculty supervision leading to the preparation of a Senior Thesis. To be taken only by students in the first semester of their senior year.
Prerequisite: Consent of instructor.

ENGL 4399 Senior Thesis II
Individual research and scholarly investigation under faculty supervision leading to the preparation of a Senior Thesis. To be taken only by students in the second semester of their senior year. This course fulfills the Senior Experience requirement of the University's Common Curriculum.
Prerequisite: ENGL 4398.

ENTREPRENEURSHIP

FACULTY ADVISORY COMMITTEE:

RICHARD V. BUTLER, Ph.D., Professor, Economics
L. BROOKS HILL, Ph.D., Professor, Speech and Drama
GERALD N. PITTS, Ph.D., Caruth Distinguished Professor, Computer Science
CLAUDIA SCHOLZ, Ph.D., Coordinator of Research Programs
MAHBUB UDDIN, Ph.D., Professor, Engineering Science; Chair
DANIEL T. WALZ, Ph.D., Professor, Business Administration

The Entrepreneurship minor is designed to cultivate, coordinate, and integrate Trinity's diverse resources for the development and application of more creative entrepreneurial behavior and achievement. It builds on the overlap of three clusters of programs: arts and humanities, science and engineering, and business and social sciences.

The Entrepreneurship minor provides students an interdisciplinary approach to the process of creativity and entrepreneurship. This minor focuses on the process of creativity, opportunity identification and evaluation, design and innovation, financing, strategy, marketing, and new venture development. This minor offers an opportunity for students to form multidisciplinary entrepreneurship project teams (E-Teams) for transforming creative ideas into practical realities, and to interact with alumni entrepreneurs.

This minor requires twenty-one hours of coursework with at least nine hours at the upper-division level.

Students who wish to go beyond the minimum required of this minor should investigate the possibility of an Interdisciplinary Second Major and prepare an expanded plan that integrates more of these courses. A form that describes the Interdisciplinary Second Major is available in the Office of the Registrar.

THE MINOR

Core Courses. From this list select twelve hours of coursework, including the specified section of GNED 1300 or GNED 2340 and ENTR 3340, 3341, and 4193.

GNED 1300	First Year Seminar: Creativity and Entrepreneurial Behavior
ENTR 2190	Exploring Entrepreneurial Opportunities
GNED 2340	Creative Thinking and the Artistic Process
ENTR 3-90	Directed Studies – Junior Level
ENTR 3340	Innovation, Design, and Entrepreneurship
ENTR 3341	Entrepreneurial Planning and Strategies
ENTR 4-90	Directed Studies – Senior Level
ENTR 4193	Capstone – E-Team Project

Elective Courses. Along with members of the advisory committee, students will select three elective courses that meet the following criteria: (1) the specific courses selected should encourage students to develop essential skills for their entrepreneurial development or lead students to investigate broader areas of social concern; and (2) the courses must be approved by the advisory committee of the minor.

ENTR 2190 Exploring Entrepreneurial Opportunities
This course focuses on the process of recognizing entrepreneurial opportunities. In this course students learn various ways to identify an opportunity such as observing trends, solving a problem, and finding gaps in the market place. Students learn how to analyze economic and social forces, technological advances, and political and regulatory changes to develop entrepreneurial opportunities. May be repeated three times.
Prerequisite: GNED 2340 (also listed as ART 2314 and DRAM/ENGL/MUSC 2340) or consent of instructor.

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 DRAM/ENGL/MUSC 2340) and junior standing, or consent of instructor.

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 DRAM/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 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 up to three hours.
Prerequisites: ENTR 3340 and senior standing.

ENTR 4193 Capstone for E-Team Project

This is the capstone course for students in the entrepreneurship program, a course in which all elements of the program are tied together. In this course each E-team project group develops a comprehensive business or operational plan for its entrepreneurial venture. Students are required to defend their strategic plan for a panel of potential investors. This course incorporates wisdom, insight, and experience of successful entrepreneurs and explains the benefits and risks involved in the proposed entrepreneurship ventures.
Prerequisites: ENTR 3341 and senior standing, or consent of instructor.

ENVIRONMENTAL STUDIES

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DIANA D. GLAWE, Ph.D., Associate Professor, Engineering Science
GLENN C. KROEGER, Ph.D., Associate Professor, Geosciences
KELLY G. LYONS, Ph.D., Assistant Professor, Biology
JENNIFER P. MATHEWS, Ph.D., Associate Professor, Sociology and Anthropology
CHAR MILLER, Ph.D., Professor, History
RICHARD K. REED, Ph.D., Professor, Sociology and Anthropology; Chair
DAVID O. RIBBLE, Ph.D., Professor, Biology
HEATHER I. SULLIVAN, Ph.D., Associate Professor, Modern Languages and Literatures

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 the Interdisciplinary Environmental Studies Capstone Experience.

Given the breadth of this minor, a significant overlap with a student's choice of Common Curriculum 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 lower division courses

*ANTH 1301 Introduction to Anthropology
*BIOL 1311 Integrative Biology I
*ECON 1311 Principles of Microeconomics
*GEOS 1304 Environmental Geology: Humans and Their Physical Environment

II. Required upper division courses (check catalog for prerequisites)

*ECON/URBS 3333 Economics and the Environment
*GEOS 3300 Oceanography

III. One course from the following list (check catalog for prerequisites)

BIOL 3434 Ecology
BIOL 3440 Animal Behavior
*CHEM 2319, 2119 Organic Chemistry
GEOS 2304 Earth Surface Processes
GEOS 3411 Hydrology
GEOS 3308 GIS and Remote Sensing

IV. One course from the following list (check catalog for prerequisites)

ANTH 2357 Humans and the Environment
ANTH 3367 South American Indigenous Peoples: Conquest and Development
ANTH 3364 Economic Anthropology
ANTH 4354 Seminar in Primatology
CMLT 2301 World Literature and the Environment
ECON 3318 Global Economy
ECON/URBS 3334 Urban Economics
HIST 3382/
URBS 3305 The City in History
HIST 4360 Seminar in United States History: Environmental History
PLSI 3313 Policy Analysis and the Policymaking Process
PLSI 3346 Geography and World Politics
*URBS 3347 Urban Systems

Recommended:
ENVI 4394 Environmental Studies Capstone Experience

ENVI 4394 Environmental Studies Capstone Experience

The Senior Capstone Experience is an independently-designed course in which students apply at least one academic perspective to an environmental research question or issue. Students will work under the direction of the Chair of the Environmental Studies Committee and with the collaboration of at least one faculty from an academic department. Students will produce a significant project or paper that demonstrates both a familiarity with the environmental subject matter and an advance undergraduate understanding of environmental analysis. The course is available to seniors and may only be taken once for credit. Enrollment only by permission of the Chair of the

Environmental Studies Committee.

ESAC CERTIFICATION: "GREEN LEAF" COURSES FOR ENVIRONMENT/SUSTAINABILITY ACROSS THE CURRICULUM (ESAC)

Students interested in an Environment/Sustainability across the Curriculum (ESAC) certification have the opportunity to study the wide-ranging interdisciplinary questions relating to the environment and sustainability through a variety of courses while they pursue any major at Trinity. The program offers a certification as a supplement to traditional majors and minors.

Students earn the certification by successfully completing a minimum of five of the "Green Leaf" courses accepted by the program. ("Green Leaf" courses are noted in the class schedules in the text under the course title.)

At least one class of the five must be taken from each of the three categories:

1) Sciences and engineering;
2) Humanities and arts;
3) Social sciences and business.

No more than two courses can be in the student's major.

Green Leaf courses counting toward certification:

1) Sciences and Engineering:

BIOL 1307	Biological Impact and Issues
BIOL 1311	Integrative Biology I
BIOL 3391	La Biodiversidad y Conservación de México
BIOL 3427	Plant Biology
BIOL 3434	Ecology
BIOL 4351	Conservation Biology
CHEM 3321	Inorganic Chemistry
ENGR 2359	Fundamentals of Environmental Engineering
GEOS 1304	Environmental Geology
GEOS 1307	Exploring Earth
GEOS 3300	Oceanography
GEOS 3411	Hydrology
PHYS 1303	The Earth's Changing Environment
PHYS 3348	Atmospheric Physics

2) Humanities and Arts:

ARTH 3352	Nineteenth-Century Architecture and Urbanism
ARTH 3364	Twentieth-Century Architecture and Urbanism
ARTH 3365	Contemporary Architecture
CLAS 1304	Introduction to Archaeology of the Aegean, Classical, and Roman Worlds
CMLT 2301	World Literature and the Environment
ENGL 3365	Nineteenth-Century British Poetry
ENGL 3371	American Literature of the Nineteenth Century: Realism and Naturalism
HIST 3337	Technology and Culture
HIST 3344	Modern Brazil
HIST 3382	The City in History (also listed as URBS 3304)
ML&L 3342	The Peoples of Russia
URBS 3304	The City in History (also listed as HIST 3382)

3) Social Sciences and Business:

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ANTH 2357	Humans and the Environment
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ANTH 3364	Economic Anthropology
ANTH 4354	Seminar in Primatology
ECON 3330	Economics and the Environment (also listed as URBS 3330)
PLSI 1332	Film, Literature, and Politics of the Third World
PLSI 1341	The Individual in World Politics
PLSI 3346	Geography and World Politics
PLSI 3349	Special Topic: Energy & the Environment
SOCI 4362	Globalization and International Development
SOCI 1316	Places and Regions in Global Context (also listed as URBS 1316)
SOCI 3340	Urban Geography (also listed as URBS 3340)
URBS 1310	Urbanization: Concepts & Realities
URBS 1316	Places and Regions in Global Context (also listed as SOCI 1316)
URBS 3330	Economics and the Environment (also listed as ECON 3330)
URBS 3340	Urban Geography (also listed as SOCI 3340)

Additional Green Leaf Courses:

GNED 1306	Energy and Society

When First-Year Seminars and Writing Workshops have topics related to environment/sustainability, or when departments offer a relevant "special topics" or "variable content" course, the Faculty Advisory Committee may approve such courses for inclusion within the ESAC certification program.

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Additional Green Leaf Courses:

GNED 1306	Energy and Society

When First-Year Seminars and Writing Workshops have topics related to environment/sustainability, or when departments offer a relevant "special topics" or "variable content" course, the Faculty Advisory Committee may approve such courses for inclusion within the ESAC certification program.

FILM STUDIES

FACULTY ADVISORY COMMITTEE:

WILLIAM G. CHRIST, Ph.D., Professor, Communication
AARON DELWICHE, Ph.D., Associate Professor, Communication
NINA C. EKSTEIN, Ph.D., Professor, Modern Languages and Literatures
PATRICK KEATING, Ph.D., Assistant Professor, Communication; Chair
THOMAS SEBASTIAN, Ph.D., Professor, Modern Languages and Literatures
RITA E. URQUIJO-RUIZ, Ph.D., Assistant Professor, Modern Languages and Literatures
MICHAEL T. WARD, Ph.D., Associate Professor, Modern Languages and Literatures

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.

THE MINOR

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

I. Complete 21 semester hours in the following distribution:
   A. FILM 1301, Introduction to Film Studies, and FILM 2301, International Cinema.
   B. Six hours taken from at least two departments from the Study Coursework list.
   C. Three hours from the Practice Coursework list.
   D. 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 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 ARTH 1301, COMM 1302, ENGL 1301, and ML&L 1301.)

FILM 2301 International Cinema
This course focuses on the cultural and critical analysis of international films as an expression of particular artistic genres and/or styles within specific historical, ideological, and cultural contexts. Films selected have achieved wide, critical acclaim; others reveal unique and important visions of human experience; while still others are selected for their political, ideological, or sociological significance. Students should develop an awareness that the medium of film has a history and that its history is not confined to national boundaries. (Also listed as ARTH 2301, COMM 2301, ENGL 2300, and ML&L 2301.)

FILM STUDIES CORE

Study Coursework

CHIN 3313	Cities of Strangers: Trans-cultural Chinese Cinema
COMM 3325	Special Topics: Women Journalists in Film and Novel
COMM 3325	Special Topics: Vietnam War in Film and Television
COMM 3325	Special Topics: Animation: The Golden Years
COMM 3325	Special Topics: Modern Animation
DRAM 2332	Play Structure and Analysis
HIST 3372	Black Images in Film
ML&L 3303	Chinese Cinema
ML&L 3311	French Cinema
ML&L 3321	German Cinema
PHIL 3357	Philosophy of Film
SPAN 3321	Spanish Cinema
SPAN 3322	Spanish American Cinema
PLSI 1332	Film, Literature, and Politics of the Third World
RELI 3318	Religion, Literature, and Film

Practice Coursework

ART 2350	Beginning Photography
ART 3350	Intermediate Photography
ART 4-50	Photography: Advanced
ART 2352	Digital Photography: Beginning
ART 3352	Digital Photography: Intermediate
ART 4-52	Digital Photography: Advanced
ART 2380	Digital Art
ART 3380	Advanced Digital Art
COMM 3340	Media Writing: Scriptwriting

COMM 3342	Visual Communication: Narrative Production
COMM 3342	Visual Communication: Theory and Practice of Montage
COMM 4350	Advanced Producing
DRAM 1320	Introduction to Production Techniques
DRAM 1352	Acting I
DRAM 2310	Principles of Design
DRAM 2314	Principles of Stage Lighting
DRAM 2352	Acting II: Scene Study
DRAM 3340	Directing
ENGL 3302	Fiction Writing

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FILM STUDIES CORE

Study Coursework

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ART 2380	Digital Art
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COMM 3340	Media Writing: Scriptwriting

COMM 3342	Visual Communication: Narrative Production
COMM 3342	Visual Communication: Theory and Practice of Montage
COMM 4350	Advanced Producing
DRAM 1320	Introduction to Production Techniques
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DRAM 2310	Principles of Design
DRAM 2314	Principles of Stage Lighting
DRAM 2352	Acting II: Scene Study
DRAM 3340	Directing
ENGL 3302	Fiction Writing

GENERAL EDUCATION

GNED 1300 First-Year Seminar
An interdisciplinary seminar focusing on various themes, required of all first-year students.

GNED 1301 Readings in Science and Religion
An examination of key issues regarding human nature and our place in the universe from religious, literary, and scientific perspectives, focusing on major debates in the discourse between science and religion in Western culture over the last five hundred years. Involves readings from primary texts, discussion of ideas in the texts both orally and in writing, and instruction in analytical and argumentative writing. Offered to first-year students as alternative to First-Year Seminar (GNED 1300).

GNED 1303 Japanese Perspectives
This course introduces the student to Japanese culture. The course begins with an inspection of Japanese religions, especially its native Shinto, Buddhism, and Zen. It includes the development from rule by Emperor through rule by military or shogun to modern democracy. A third section covers the development of Japanese aesthetics as seen in its major literary and artistic production, for example, in poetry, Noh drama, ink-brush painting, pottery, and drama/film. The last section of the course covers the modern era, from Japan's reopening to outsiders in the 19th century to its current place as a world power. The stresses on Japanese social structures as they adapt to Western influence are viewed through a variety of means: government policies, societal experiments, novels and films, and so on. (Also listed as ANTH 1303 and ML&L 1303.)

GNED 1306 Energy and Society
A study of the physics and technology of energy systems and their impact on society.

GNED 2110 McNair Tutorial – Sophomore Level
An examination of research design, research ethics, the presentation of research findings, and related issues for sophomore level participants in the McNair Scholars Program. May be repeated for a maximum of two hours credit. Pass/Fail only.
Prerequisites: Admission to the McNair Scholars Program and consent of instructor.

GNED 2340 Creative Thinking and the Artistic Process
This course encourages students to synthesize a theoretical and experiential approach to the creative process as studied through the visual arts, music, creative writing, and theatre. Students enter into the creative process as a means to develop creative self-expression, aesthetic sensibility, and an understanding of the arts. The nature and drive of artistic endeavor is explored through studies of the lives of significant thinkers and artists, examination 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, DRAM 2340, ENGL 2340, and MUSC 2340.)

GNED 3110 McNair Tutorial – Junior Level
An examination of research design, research ethics, the presentation of research findings, and related issues for junior level participants in the McNair Scholars Program. May be repeated for a maximum of two hours credit. Pass/Fail only.
Prerequisites: Admission to the McNair Scholars Program and consent of instructor.

GNED 3-12 McNair Research Internship
Independent study in connection with McNair Scholars Program research activities. May be repeated for a maximum of four hours credit. Pass/Fail only.
Prerequisites: Admission to the McNair Scholars Program and consent of instructor.

GNED 3325 The U.S. Latino Experience
An examination of the evolution of the Latino communities of the United States, with attention to the role of U.S. foreign policy in creating Latino communities, the impact of domestic policy on the various sub-groups, continuity and change in the Latino communities of the U.S., and the emergence of a trans-national Latino community and culture in the U.S.

GNED 3326 U.S. Latino Cultural and Artistic Expression
An examination and evaluation of U.S. Latino artistic/cultural expression, with specific attention to the artistic production of U.S. Latino artists, and the development of a unique U.S. Latino artistic expression.

GNED 3328 The Peer Tutor
Course for peer tutors in the First-Year Seminar.

GNED 3-91 Special Topics in General Education
Nondepartment-specific special-topic courses. Each offering must be approved by the University Curriculum Council. Students may repeat the course if on a different topic. There may be prerequisites.

GNED 4110 McNair Tutorial – Senior Level
An examination of research design, research ethics, the presentation of research findings, and related issues for senior level participants in the McNair Scholars Program. May be repeated for a maximum of two hours credit. Pass/Fail only.
Prerequisites: Admission to the McNair Scholars Program and consent of instructor.

GNED 4300 Senior Interdisciplinary Seminar
An interdisciplinary seminar focusing on various themes drawn from the humanities, social sciences, natural sciences and/or quantitative reasoning. One of the four options for satisfying the Senior Experience requirement.
Prerequisite: consent of instructor.

GNED 4301 Senior Synthesis
A course designed to allow the student to draw together and apply creatively the content acquired in the courses taken in the Understandings. One of the four options for satisfying the Senior Experience requirement. Significant paper and presentation required for

completion.
Prerequisite: 3.0 GPA or better and consent of the course administrative coordinator.

HUMA 1600 Readings from Western Cultures
An examination of persistently contested ideas in the history of Western cultures, focusing on the intellectual heritage of the Greco-Roman and Judeo-Christian strands of Western history. Involves readings from primary texts, discussion of ideas in the texts both orally and in writing, and instruction in analytical and argumentative writing. HUMA 1600 combines sections of First-Year Seminar and Writing Workshop into an integrative academic experience with one common theme, syllabus, and readings. (Also listed as GNED 1300 and ENGL 1302.)

GEOSCIENCES

THOMAS W. GARDNER, Ph.D., Imogene and Harold D. Herndon Distinguished Professor of Geology
GLENN C. KROEGER, Ph.D., Associate Professor; Chair
DIANE R. SMITH, Ph.D., Professor; Associate Vice President for Academic Affairs
BENJAMIN SURPLESS, Ph.D., Assistant Professor
KATHLEEN SURPLESS, Ph.D., Assistant Professor

THE MAJOR

BACHELOR OF ARTS DEGREE IN EARTH SYSTEMS

The Bachelor of Arts program prepares students interested for careers or disciplines (e.g., environmental science, secondary education, law, geography) that requires a fundamental understanding of earth systems. This program offers flexibility, allowing students to pursue intensive study in other disciplines. The requirements for the degree of Bachelor of Arts with a major in Earth Systems are:

I. The common curriculum

II. Departmental requirements:
   A. 30 semester hours in geosciences, including:
      1. GEOS 1407; or GEOS 1303 and GEOS 1101; or GEOS 1304 and GEOS 1101.
      2. GEOS 2401, 2304, and 3400.
      3. Participation in GEOS 3120 is required for junior majors. Trip expenses, including transportation, must be paid by each student.
      4. At least fourteen additional upper division hours in geosciences; no more than three hours of Directed Studies or Thesis may be applied to this upper division hour requirement.
   B. 18 additional semester hours from the following courses:
      1. At least 9 semester hours from ANTH 2310, BIOL 1311, 1111, 3434; BUSN 2301; CHEM 1318, 1118, 2319, 2119; MATH 1307, 1308, 1311, 1312, 1320; CSCI 1320, PHYS 1303, 1309, 1311, 1111, 1310, 1312, 1112; PSYC 2401.
      2. At least 6 semester hours from CMLT 2301; ECON/URBS 3330; ANTH 2310, 2357, 3363; PHIL 2350, 2356; PLSI 3346; SOCI 1316, 2314; URBS 3340.
   C. Completion of the Senior Experience is satisfied by one of the following: GEOS 4301, GEOS 4390, GEOS 4395, or an approved Senior Experience in a second major.

III. Electives sufficient to total 124 hours.

BACHELOR OF SCIENCE DEGREE IN GEOSCIENCES

The Bachelor of Science program prepares students for graduate work in geosciences or for entry-level positions in geosciences or related fields. The program serves the student interested in a broad-based introduction to geosciences and provides the opportunity for research in the field or laboratory setting for students at the upper division level.

The requirements for the degree of Bachelor of Science with a major in geosciences are:

I. The common curriculum

II. Departmental requirements:
   A. 36 semester hours in geosciences, including:
      1. GEOS 1407; or GEOS 1303 and GEOS 1101; or GEOS 1304 and GEOS 1101.
      2. GEOS 2401, 2304, 3400, 3309, and 3401; plus 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.
      3. Participation in GEOS 3120 is required for junior majors. Trip expenses, including transportation, must be paid by each student.
      4. Completion of the Senior Experience is satisfied by one of the following: GEOS 4303, GEOS 4390, or GEOS 4395.
   B. MATH 1307 or 1311 and one of MATH 1308, 1312, or 1320; CHEM 1318 and 1118; PHYS 1309 or 1311, PHYS 1310 or 1312; PHYS 1111 and 1112.

III. Electives sufficient to total 124 hours. It is recommended that students planning to attend graduate school or enter directly into a field-oriented aspect of the discipline take an accredited and departmentally approved summer field geology course.

GUIDELINES FOR ACCEPTANCE OF MAJORS

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

   1. Completion of GEOS 1407; or GEOS 1303 and GEOS 1101; or GEOS 1304 and GEOS 1101; and two of GEOS 2401, 2304, or 3400 with a grade of C or better.
   2. A cumulative grade point average of at least 2.0.

II. Provisional acceptance may be granted to students who have not yet met the above requirements if there is a reasonable expectation that they can complete the major.

THE MINOR

This course of study is designed for students who desire to study geosciences in some depth although their major is in another field. The

requirements are 18 semester hours in geosciences including one of GEOS 1407, or GEOS 1303 and 1101, or GEOS 1304 and 1101; GEOS 2401 or 2304, plus additional geosciences hours to total 18, nine of which must be upper division.

HONORS IN GEOSCIENCES

A student in Geosciences may work toward Departmental Honors by satisfying the University guidelines for Departmental Honors published in this bulletin, including the minimum 3.33 cumulative grade point average and 3.33 grade point average or better in the major. In addition, the Department of Geosciences has the following requirements:

Application and Procedures

Students planning to write a thesis in geosciences must discuss research plans with at least two department faculty members and secure the support of the thesis director and second reader by the end of the Junior year. Normally the student will initiate research during the Junior year or the summer following the Junior year.

Requirements

Six hours of Thesis credit, GEOS 4395 and 4396, must be completed over two semesters. Students may enroll for thesis credit only with the permission of the thesis director. A formal written thesis proposal must be submitted to the geosciences faculty before the end of the fourth week of classes during the first semester of enrollment for thesis credit. The student may become a formal candidate for Departmental Honors by addressing a written request for consideration, accompanied by a letter of support from the student's thesis director, to the Chair of the department. Achievement of Department Honors will be determined by the quality of the thesis research, the written and oral presentations, and satisfaction of University requirements.

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COURSES

GEOS 1101 Physical Geology Laboratory
Hands-on investigations of geologic materials and processes, including minerals, rocks, topographic and geologic maps. Projects will include topics in environmental geology and volcanology. Field trip is required; field trip costs must be paid by each student. GEOS 1407 and 1101 cannot both be taken for credit. Laboratory, 3 hours per week.
Co- or prerequisite: GEOS 1303 or 1304.

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. Field trip may be required; field trip costs must be paid by each student.

GEOS 1304 Environmental Geology
A study of the environment that humans inhabit on Earth. Topics include geologic hazards such as volcanism, earthquakes, mass wasting and flooding; geologic resources such as soils, groundwater, mineral resources and fossil fuels; and the interaction of human activities with the geologic environment including urban development, flood control, agriculture, and climate change. Field trip is required; field trip costs must be paid by each student. Only one of GEOS 1304 or 1307 may be taken for credit.

GEOS 1407 Exploring Earth
An inquiry-based introduction to the Earth, geological materials, and processes. Investigations include such topics as evidence for plate tectonics, properties of minerals, study of rocks in hand specimen and thin-section, geologic maps and cross sections, earthquake seismograms, volcanic processes and landforms, geologic time and radiometric dating and geophysical studies of the subsurface. Three class hours and three laboratory hours each week. Fields are required; field trip costs must be paid by each student. GEOS 1304 and 1407 cannot both be taken for credit. GEOS 1407 and 2101 cannot both be taken for credit.

GEOS 2401 Earth History
A study of the significance of time as reflected in the rock and fossil record, with emphasis on understanding geological processes within a time framework. An analysis of time concepts, stratigraphic principles, and the fundamentals of sedimentary geology including the historical development of geological concepts and the recognition and reconstruction of ancient environments. Laboratory: study of minerals, rocks, and fossils; interpretation of surface features and time relationships through the use of topographic and geologic maps, cross sections, correlation diagrams, and aerial photos. Three class hours and three laboratory hours a week. Field trips are required; field trip costs must be paid by each student.
Prerequisite: GEOS 1407, or GEOS 1303 and 1101, or GEOS 1304 and 1101.

GEOS 2304 Earth Surface Processes
A survey of the important processes that create landforms on the Earth's surface. Emphasis will be on chemical and physical weathering, running water, wind, ice, and the resulting erosional and depositional landforms. The laboratory component will emphasize data collection and analysis techniques, including topographic maps, surveying, and field trips. Two class hours and three laboratory hours per week for one semester. Field trips required; field trip costs must be paid by each student.
Prerequisite: One of GEOS 1303, 1304, or 1407.

GEOS 3300 Oceanography
A study of the geologic, chemical, physical, and biological aspects of the Earth's oceans. Topics include plate tectonics, seawater composition, waves, tides, currents, marine habitats and ecosystems, economic resources, and global climate change. Field trip required; field trip costs must be paid by each student.
Prerequisite: Successful completion of a college-level biology, chemistry, geoscience, or physics course.

GEOS 3308 GIS and Remote Sensing
An introduction to computer based mapping and spatial data analysis used in earth and life sciences and environmental monitoring and management. Topics include: cartographic principles and the use of GPS; data and image storage formats; geostatistics and visualization of geospatial data sets; acquisition and analysis of remote sensing data, including airborne and satellite multispectral and radar data, principal component analysis and classification techniques; raster and vector based Geographic Information Systems (GIS).
Prerequisites: Completion of computer skills requirement; completion of at least two college-level courses in computer science, biology, or geoscience; or consent of instructor.

GEOS 3309 Tectonics
A study of the tectonic processes of the Earth with emphasis on the historical development of tectonic theory and current research in tectonics. Topics include: geophysical and geochemical characterization of the Earth's interior, plate kinematics and dynamics, earthquake mechanisms, the nature and origin of continental crust and margins, and the relationship between tectonics and rock-forming processes.
Prerequisites: GEOS 3400.

GEOS 3400 Earth Materials
An introduction to the origin, classification, and identification of minerals and rocks, including topics related to crystal systems and structures, bonding, mineral chemistry, the nature of magma, solidification of magma, magma genesis and evolution, types of metamorphism, metamorphic mineral reactions, metamorphic zones and facies, determination of metamorphic grade, and the importance of mineral and rock resources to our society. The laboratory will emphasize methodologies and techniques used to identify and classify common minerals and rocks in hand specimen and thin section. Three class hours and three laboratory hours per week.
Prerequisite: GEOS 1407, or GEOS 1303 and 1101, or GEOS 1304 and 1101.

GEOS 3401 Structural Geology
A study of the mechanics of crustal deformation in the context of plate tectonics. An introduction to the descriptive, kinematic, and dynamic analysis of structures such as folds, faults, joint systems, and foliation. Emphasis on the application of structural cross-sections, stereonet analysis, graphical techniques, and computer applications to problems involving stress and strain of earth materials. Three class hours and three laboratory hours per week. Field trips required; field trip costs must be paid by each student.
Prerequisite: GEOS 2401.

GEOS 3402 Paleontology
A study of invertebrate fossils, their classification, morphology, and geologic history. Also included will be an introduction to the principles of paleontologic investigation and their application to the study of geology. Three class hours and three laboratory hours a week.
Prerequisite: GEOS 2401 or consent of instructor.

GEOS 3405 Field Methods in Quaternary Geology
A study of the tectonic and climatic controls on long-term landscape evolution. Emphasis will be on field and laboratory techniques for describing Quaternary landforms and deposits. Three class hours per week and an all-day field trip every other Saturday for one semester. Field trips required; field trip costs must be paid by each student.
Prerequisite: GEOS 2304.

GEOS 3411 Hydrology
A description of the terrestrial hydrologic cycle and its fundamental components including precipitation, evapotranspiration, infiltration, hillslope hydrology, runoff, flood hydrology, and groundwater flow. Emphasis will be placed on physical principles governing the movement of water across and through the Earth's surface. Human interaction with all aspects of the hydrologic cycle will be addressed. The laboratory component of the course will focus on data collection, analysis and manipulation, and involve a significant field component. Three class hours and three laboratory hours a week. Field trips are required; field trip costs must be paid by each student.
Prerequisites: GEOS 2304; PHYS 1309/1111 or PHYS 1311/1111 or equivalent.

GEOS 3312 Geophysics
Introduction to the use of physical principles and measurements in the study of the Earth. Topics include Fourier transforms, seismic waves in elastic media, exploration and earthquake seismology, gravity, magnetics, and heat flow. Computer modeling of geophysical processes and field work with geophysical instruments. Same as PHYS 3312. Field trips are required; field trip expenses must be paid by each student.
Prerequisite: PHYS 1310 or 1312 (may be taken concurrently).

GEOS 3120 Majors' Field Trip
Field study of selected areas in Texas and surrounding regions: emphasis on developing observational and interpretative skills in the field. May only be taken on a Pass/Fail basis. Field trip costs must be paid by each student.
Prerequisite: Departmental major or by invitation of the department.

GEOS 3321 Geochemistry
A study of geochemical principles and their application in solving geologic problems. Emphasis is placed on topics in inorganic geochemistry, including phase equilibria, isotopes and trace elements.
Prerequisites: GEOS 3400 and MATH 1311 or consent of instructor.

GEOS 3422 Sedimentology and Stratigraphy
The identification, description, and interpretation of sediments, sedimentary rocks, and sedimentary strata; an introduction to the principles of stratigraphy and of sedimentary processes as they relate to modern depositional systems and their ancient analogs. Emphasis will be placed on the interpretation of depositional systems and sequence stratigraphy. Three class hours and three laboratory hours a week. Field trips are required; field trip costs must be paid by each student.
Prerequisites: GEOS 2401 and 3400.

GEOS 3-90 Directed Studies - Junior Level
Individual work under supervision. Credit may vary.
Prerequisites: Major or minor standing and consent of project supervisor.

GEOS 3-91 Special Topics
An in-depth study of a topic in geosciences that is otherwise not covered in existing courses. May be repeated for credit on different topics.
Prerequisite: Consent of Instructor.

GEOS 4301 Senior Seminar in Earth Systems
An in-depth synthesis of selected topics from the earth systems curriculum, with application to current environmental problems. This course fulfills the Senior Experience requirement of the University's Common Curriculum.

GEOS 4395 Thesis Research
Student research conducted under the supervision of a Trinity University thesis director, and written communication of the research in thesis format. Course enrollment requires initiation of research during the Junior year. A written and oral thesis proposal must be presented

to the department.
Prerequisites: Senior standing, acceptance by a thesis advisor, approval from the department chair.

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.

GEOS 4-90 Directed Studies - Senior Level
Individual work under supervision. Credit may vary.
Prerequisites: Major or minor standing and consent of project supervisor.

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 Administration); 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 achieve productive scholarship and professional competence in the area of their specialization, with emphasis upon the development of analytical thinking, independent and original research, and effective communication.

The University's Coates Library offers exemplary collections, ample study space, group interaction rooms, and contemporary electronic resources in support of graduate work. Librarians team with faculty in the graduate programs to provide instruction on organizing optimal access to Internet-based tools, including databases specific to each graduate program. Collections of print resources provide research-level support for every graduate program.

COMMISSION ON GRADUATE STUDIES

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

GRADUATE FACULTY

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

ADMISSION

BACHELOR'S DEGREE REQUIREMENT

Graduates holding the bachelor's degree from an institution accredited by the appropriate regional accrediting organization and fulfilling all other requirements listed below may be admitted to graduate study in full standing. Graduates of colleges that are not accredited by the appropriate regional accrediting body may be admitted as provisional students at the discretion of the director of graduate studies and the Department Chair. Students who are close to completing the requirements for a bachelor's degree at an accredited university are occasionally permitted to enroll for a limited number of graduate courses at Trinity University. For further information, contact the specific department.

PREREQUISITE COURSE REQUIREMENTS

The requirement for background work varies with each graduate program at Trinity. The department chair or director of graduate study in a department 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.

ADMISSION CATEGORIES

FULL ADMISSION - Requirements for full admission normally include:

1) 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 on all work taken in the undergraduate major field.
2) Acceptable scores not over six years old on the Graduate Record Examination or Graduate Management Admissions Test, if required.
3) Letters of recommendation from individuals familiar with student's ability to pursue graduate study.
4) Departmental acceptance into the Graduate Program.

* Students who have earned at least 18 hours of graduate level credit must have a GPA of 3.00 or better on all graduate course work attempted. Graduate credit may be considered in lieu of undergraduate course work.

PROVISIONAL ADMISSION - Students who are not eligible for full admission may normally be granted provisional admission in cases where:

1) The grade point average is between 2.60 and 3.00 on the last 60 hours of undergraduate level work and/or between 2.60 and 3.00 on all work taken in the undergraduate major.
2) Test scores, if required, are below acceptable levels.
3) Prerequisite work is required.

Note: Students admitted provisionally are reviewed after completion of their first 9 hours of graduate study. Those who have maintained a 3.00 average are eligible to apply for candidacy; those with an average below 3.00 are dropped from the graduate program.

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

1) Those interested in enrolling in only one graduate course or specialized workshop offered by the University.
2) Those interested in taking graduate courses but who do not wish to work toward a master's degree. (This category includes those who already hold a graduate degree and wish to take further work on a non-degree basis.)
3) Those currently working on graduate degrees at other colleges or universities who wish to take work at Trinity for transfer purposes. Students in this category are advised to check in advance with these other universities to be sure the Trinity work will be accepted.

Students admitted to a program on a non-degree basis 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.

FORMAL APPLICATION FOR ADMISSION

Students interested in doing graduate work at Trinity University should make application to the appropriate academic department and must submit to the Graduate Admissions Office the following items:

1) Application form and fee.
2) An official transcript or transcripts of all previous college and university work. These transcripts must be current (not over one year old). All transcripts become a part of the University's files and will not be returned.
3) Test scores not over six years old on the Graduate Record Examination, Graduate Management Admission Council exam, or any other similar examinations. Consult departmental listings for specific requirements.
4) One or more letters of recommendation if specified by the department in which the student plans to major.

The application for admission to graduate study and all supporting papers should be sent well in advance of the opening of the session that the student plans to attend. Because of the number of applications for some fields and the necessity of handling each case with care, the admissions procedure requires considerable time after the application and supporting materials have been received. The application deadline is one month prior to the beginning of the semester or as established by the program. Students outside the United States should submit their applications at least three months prior to the semester they plan to enter the University. Registration is not permitted until application for admission is approved.

The final decision on admission is made by the Office of Academic Affairs after receiving the recommendation of the academic department involved.

ADVISING AND REGISTRATION

After admission has been approved, degree students should confer with the graduate program director of the major department or with an advisor appointed by the program director to arrange a complete program of graduate studies. This approved program will be deemed tentative until the applicant has been admitted officially to candidacy for the degree. (See requirements for admission to candidacy.) Students admitted to graduate study will follow the regular university procedures for registration.

READMISSION

A graduate student who has not attended Trinity University within twelve months prior to the term for which the student plans to re-enroll must submit an application for readmission no later than one month prior to the beginning of the term. Official transcripts from any colleges or universities attended during the time since the student last attended Trinity University must be submitted as part of the application for readmission. No new application fee is required. The decision to readmit a student is made by the department.

A graduate student returning to Trinity University after an absence of less than twelve months and without a change in his or her program of study, need only complete the Returning Graduate Student Information Form and submit official transcripts from any colleges or universities attended during the time since the student last attended Trinity University. The Returning Graduate Student Information Form should be submitted to the Graduate Admissions Office at least one month prior to the beginning of the term the student plans to attend. The student should also consult his or her graduate program director well in advance of registration.

ADMISSION TO CANDIDACY

Admission to candidacy for a master's degree is a separate step from admission to graduate study. As soon as a student has completed 9 semester hours of graduate work at Trinity with an overall GPA of 3.0, he or she must apply for admission to candidacy for a master's degree in the office of the specific department. This application must be approved by the director of graduate study of the student's major department.

At the time of admission to candidacy the program of study of the student becomes official and may not be changed without the consent of the advisor and Department Chair.

APPLICATION FOR CANDIDACY MUST BE COMPLETED BEFORE THE SEMESTER IN WHICH THE STUDENT INTENDS TO GRADUATE.

MINIMUM HOUR AND GPA REQUIREMENT

A minimum of thirty semester hours is required for the master's degree. In addition to thirty semester hours of course work, the candidate must complete one or more of the following:

1) A thesis.
2) A minimum of 6 additional hours of course work.
3) An applied research project.
4) A comprehensive examination.
5) Completion of an internship or residency.

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

SPECIAL REQUIREMENTS

Departments may require a demonstration of proficiency in the use of research tools, such as foreign languages, mathematics, statistics, or computer languages relevant to the area of graduate study. Such proficiency shall be determined by the department and certified to the Office of Academic Affairs by the chair of the department or director of graduate study in the department, before the student is admitted to candidacy for the degree.

APPLICABLE BULLETIN

Students have the option of completing degree requirements as specified in the Trinity University *Courses of Study Bulletin* in effect at the time of matriculation

provided all requirements are completed within six years (see Time Limit) or following requirements of any later bulletin that satisfies the six-year time limit.

THESIS

Departments may require completion of a master's thesis. Consult departmental listings for specific requirements. Six semester hours of credit are allowed for the thesis.

After admission to candidacy, the student shall request of his or her advisor the formation of a thesis committee. After consultation with the student, this committee will be recommended to the Department Chair by the director of graduate studies of the department in which the student is doing his or her major work. The committee will be composed of two faculty members from the candidate's major field of study and one faculty member from a related department or field of study.

The form of the thesis will be in accordance with instructions specified by the department. A copy should be submitted to the chair of the thesis committee on the date specified by him or her which is well in advance of the due date in the Graduate Bulletin. All members of the committee shall read and approve this draft before the final copies are prepared.

Final approval of the thesis requires acceptance by all members of the committee and approval by the chair of the major department (or director of graduate study) and the Office of Academic Affairs. The student must have four copies of the thesis prepared early enough so that the readers may have time to check the copies carefully before signing the approval pages.

After the thesis has been approved, the four copies will be submitted to the Office of Academic Affairs on or before the date listed in the calendar at the front of this bulletin. Four copies of the thesis will be bound by the University at the student's expense. After binding, two copies will be filed in the library and one copy given to the major department. The student receives the fourth copy.

Candidates for master's degrees with a thesis must be registered for credit or for the thesis in the semester or summer term in which they expect to receive the degree. When a student has previously registered for the six hours of thesis credit, he or she will be expected to register for 6098, for which he or she will receive no credit hours but which will fulfill this requirement. There will be a nominal fee of $10 for registration for 6098.

APPLIED RESEARCH PROJECTS

Some departments require completion of a project as part of the degree requirements. Consult department listings for specific requirements. Procedures for submitting the project for approval may vary, and students should consult the department chair or director of graduate study for departmental and divisional procedures. Candidates for master's degrees with a project must be registered for credit or for 6099 in the semester or summer term in which the degree is expected. There will be a nominal fee of $10 for registration for 6099.

INTERNSHIPS AND RESIDENCIES

A number of graduate programs require internships, residencies, or other practicum experience. See departmental listing for specific requirements.

COMPREHENSIVE EXAMINATION

A comprehensive examination, written or oral or both, may be required of candidates for the master's degree. The results of the comprehensive examination must be reported to the Department Chair one week before the student expects to receive the degree. Consult departmental listings for specific requirements.

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.

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 submitted to the Registrar at least ten days prior to commencement a written request for permission 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 6099. There will be a fee of $200 for registration for 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 or required internship 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 percent of the total degree requirement can be transferred to apply toward a graduate degree. No hours earned toward a completed or previously awarded graduate/professional degree may be transferred. However, students with a previously awarded graduate/professional degree may have up to 10 semester hours but no more than twenty percent of the total degree requirement waived by the chair of the department. Students granted such a waiver may not transfer any credit to apply toward a graduate degree, except on petition to the Commission on Graduate Studies. Furthermore, the GPA of transferred credit will not be applied to meet the GPA requirement for a graduate degree at Trinity. No transfer credit will be

accepted or waiver approved until the student has earned 12 semester hours of graduate credit at Trinity University. The six-year limit applies to transfer work as well as to courses taken in residence.

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

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

INDEPENDENT STUDY

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

GRADES AND MINIMUM PERFORMANCE REQUIREMENTS

The grading system for all graduate courses is as follows:

A	Excellent - Superior Performance
B	Good - Solid Performance
C	Fair - Marginal Performance
F	Failure - Not meeting course requirements
I	Incomplete
PR	In Progress - for thesis or special study/research courses
PP	Pass in a Pass/Fail Course
FF	Failure in a Pass/Fail Course
NC	Non-credit
Pass/Fail	Departments desiring to offer selected courses only on a Pass/Fail basis may do so with prior approval of the Office of Academic Affairs.
W	Withdrawn - Graduate students may withdraw from a graduate course with a grade of W any time up to the time that mid-semester grades are due for that semester or during the first two weeks of summer session. Such withdrawal must be filed at the Office of the Registrar. Non-attendance does not constitute withdrawal from a class. Students may withdraw with a grade of W up to final examination week. However, such withdrawal must be approved by the Department Chair or Graduate Program Director in consultation with the instructor.

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

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

Probation and Dismissal:

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

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

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.

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.

GRADES FOR THESIS

A student will receive a grade of PR for 6388 and 6389 if the thesis is not completed at the end of the semester or summer term for which the student registered for thesis credit. Subsequent registrations for 6098 will automatically receive a grade of NC. When the thesis is completed, the thesis director will process a Change of Grade to change the PR to the appropriate grade.

HEALTH CARE ADMINISTRATION

AMER A. KAISSI, Ph.D., Associate Professor
WILLIAM C. McCAUGHRIN, Ph.D., Associate Professor
JODY R. ROGERS, Ph.D., Visiting Associate Professor
EDWARD J. SCHUMACHER, Ph.D., Associate Professor
TED R. SPARLING, Dr.P.H., Associate Professor
MARY E. STEFL, Ph.D., Professor; Chair

The Department of Health Care Administration offers an M.S. degree only, and does not have an undergraduate major. The department does offer, however, three undergraduate courses. HCAD 3333 (Health Economics) and HCAD 3350 (The U.S. Health Care System) fulfill a Common Curriculum requirement for Understanding Human Social Interaction: Social Issues and Values. HCAD 3383 (Management of Health Care Organizations) is cross-listed with MGMT 3383 and can be applied towards a Management concentration in Business Administration.

ON-CAMPUS PROGRAM

The graduate program in Health Care Administration is designed to promote the development and refinement of the conceptual, interpersonal, and technical skills necessary for understanding individual and community health problems, for effective planning for and management of health care organizations and institutions, and for leadership in the community at large.

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 $30 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. The general deadline for application is June 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 prerequisites should be completed in advance of the student's registration. An applicant may fulfill the requirements in one or more of the following ways:

1. 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.)

2. 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 48 semester 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 advisor 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 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 5353	Financial Management for Health Care Administration
HCAD 5365	Leadership and Conflict Management
HCAD 5373	Health Administration Ethics
HCAD 5380	Health Care Human Resource Management
HCAD 5383	Health Care Institutional Management
FNCE 5351	Financial Analysis for Decision Making

HCAD 5-90 Problems
Independent reading and research. Credit varies from 1 to 6 semester hours, based on the scope and depth of the proposed work. Prerequisites: 12 semester hours in health care administration and consent of instructor.

HCAD 5101 Seminar in Professional Development for Health Care Executives
This course is designed to introduce students to the professional requirements associated with being a health care executive. Students will be introduced to the behavior, dress, demeanor, and expectations of health care administrators. In addition, students will be introduced to the professional competencies so important to an executive's success in today's health care environment.

HCAD 5102 Physicians and Physician Relations
This course is designed to introduce students to the various roles and responsibilities that physicians assume in the health care system. Topics will include physician education, physician culture, physician practice patterns, physician executives, and the management of physician practices. Special emphasis will be on strategies to foster effective relationships between physicians and health care management.

HCAD 5220 Statistical Analysis in Health Care Organizations
This course covers topics in basic statistical analysis designed to assist the future health leader in understanding and interpreting data and in the role of decision maker. The course covers the collection, aggregation, and presentation of data and basic descriptive and inferential statistics. Students will get hands-on instruction in the application of spreadsheets and statistical software to the solution of various statistics problems.

HCAD 5221 Operations Management in Health Care Organizations
Applications of operations research techniques to health care planning, control, and decision making, including deterministic and random models, mathematical programming, queuing, simulation, forecasting, and quality improvement. Emphasis is placed on model formulation ad computer solution of decision models.

HCAD 5310 Health Services Organization and Policy I
An overview of the organization, delivery, financing, and evaluation of the U.S. health care system. Emphasis is on major system components and their inter-relationships. Key concepts include: social values, health personnel, health facilities, major financing mechanisms, and health policy.

HCAD 5311 Health Services Organization and Policy II
Continuation of HCAD 5310 providing an overview of the organization, delivery, financing, and evaluation of the U.S. health care system. Emphasis is on: health care financing and regulation, organized delivery models, quality assessment and management, and health program effects on patients, providers, and payers.

HCAD 5313 Economic Aspects of Health Care Administration
Application of economic concepts to the health care sector. Demand and supply, elasticity, health insurance, regulation, competition, and cost-effectiveness analysis. Emphasis on use of economic analysis for strategic planning.

HCAD 5330 Health Care Organization Theory and Management
Cases, concepts, and research findings in health care organizational behavior and administration. Analysis of the impact of individuals, groups, organizational structure, and environment on management performance. Instruction on formulating organizational strategy.

HCAD 5333 Legal Aspects of Health Care Administration
The legal principles and processes influencing health care providers. Basic instruction in contract law and tort law. Focus on major health care liability producing areas and interface between law and ethics.

HCAD 5340 Health Care Strategic Planning and Marketing
An analysis of the strategic planning and marketing processes used by health care managers. The processes examined include the uses of strategic planning models and marketing methodologies as they apply to patients, physicians, and managed care buyers as separate markets for health care services.

HCAD 5350 Seminar in Current Health Care Issues
This is an integrative seminar where current topics in health care administration are examined in a broad context. Skills and knowledge introduced earlier in the curriculum are used to analyze current health care issues, and special efforts are made to include the perspective of practitioners.

HCAD 5353 Financial Management for Health Care Administration
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.

HCAD 5360-5361 Seminar in Contemporary Issues
Contemporary issues in health care administration, including new forms of organization for health services delivery, financing of health care, and increased governmental regulation of health services. May be repeated on different topics.

HCAD 5365 Leadership and Conflict Management
An introduction to leadership and conflict management theories, models, and practices within health care organizations. Areas to be covered include leadership models and theories common to organizations delivering health care services, various leadership styles and their application in the health care industry, methods and techniques that can be used to manage conflict within organizations, and exposure to current trends and conceptual models of leadership and conflict management.

HCAD 5373 Health Administration Ethics
An analysis of health care issues through lecture, case study, and practitioner involvement. Emphasis on overseeing the moral mission of health institutions while at the same time maintaining the economic viability of those institutions.

HCAD 5380 Health Care Human Resources Management
Analysis of health manpower; professional, technical, and continuing education; credentialing; and emerging directions in strategic human resource management. The recruitment, selection, compensation, retention, and performance evaluation of health manpower; the role of independent contractors of services; and the impact of federal legislation such as NLRA, FLSA, OSHA, EEOA, and ERISA.

HCAD 5383 Health Care Institutional Management
The organization and management of health care institutions in an era of change in the health care system. The course covers the major systems in organizations delivering health care services, involving organizational design, governance, executive functions, clinical systems, and support systems.

HCAD 5385 Quality Control Management in Health Care Administration
Conceptual framework and practical tools for measuring and improving the quality of care in health care settings; role of JCAHO and other regulators in quality assurance; the organizational setting of quality management functions; cost/quality relationships; and patient and consumer involvement in quality improvement functions.

HCAD 5387 Information Systems for Health Care Administration
A survey of the current status of management information systems in health services administration. This course prepares students to participate in the analysis of information systems requirements, design of information systems, evaluation and selection of computer resources, and management of the implementation process.

HCAD 6000 Thesis Renewal

HCAD 6099 Degree Requirements in Progress

HCAD 6201, 6202, 6203 Administrative Residency
Field experience in a health care organization under the supervision of a selected preceptor and a university faculty member. The student is oriented to the total operations of the institution and participates in administrative activities in preparation for major administrative responsibilities. The preparation of three reports is required during the residency to demonstrate the integration and application of theory and management skills to practical problems of health care institutions.

HCAD 6300 Thesis

EXECUTIVE PROGRAM

Trinity University's Health Care Administration Executive Program is designed to meet the educational needs of those individuals currently holding responsible positions in a health care organization. The Executive Program is a part-time, distance-learning experience designed for individuals employed full-time in the health care field. Because students must have prior management-level experience, the program fosters learning opportunities that integrate the theory and principles of health care administration with the richness of each participant's practice setting. A detailed description of the Executive Program can be found at the department's website: http://www.trinity.edu/ departments/healthcare.

The program requires 23 months to complete 42 credit hours. Students register for two to three courses (two to four 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 $30 application fee, official transcripts from all previous colleges attended, including evidence of a baccalaureate degree from an accredited institution, aptitude test scores from the Graduate Record Examination (GRE) or Graduate Management Admission Test (GMAT), 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. A graduate degree can obviate the need to take the GRE or GMAT. 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 semester 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
- HCAI 5231 Health Care Organization Theory and Management
- HCAI 5223 Information Technology
- HCAI 5270 Health Administration Ethics

Summer Semester
- HCAI 5301 Managerial Accounting
- HCAI 5340 Managerial Epidemiology

Second Year

Fall Semester
- HCAI 5380 Health Care Human Resources Management
- HCAI 5353 Financial Management for Health Care Administration

Spring Semester

HCAI 5313 Economic Aspects of Health Care Administration
HCAI 5360 Leadership Effectiveness
HCAI 5456 Seminar in Strategic Planning and Marketing

Summer Semester
HCAI 5333 Legal Aspects of Health Care Administration
HCAI 5451 Seminar in Strategic Management of Health Services

The Degree of Master of Science in Health Care Administration is conferred by Trinity University upon completion of all coursework.

HCAI 5220 Statistical Analysis in Health Care Organizations
This course covers topics in basic statistical analysis designed to assist the future health leader in understanding and interpreting data and in the role of decision maker. The course covers the collection, aggregation, and presentation of data and basic descriptive and inferential statistics. Students will get hands-on instruction in the application of spreadsheets and statistical software to the solution of various statistics problems.

HCAI 5221 Operations Management in Health Care Organizations
This course covers topics in basic applications of operations research techniques to health care planning, control, and decision making, including deterministic and random models, mathematical programming, queuing, simulation, forecasting, and quality improvement. Emphasis is placed on model formulation and computer solution of decision models.

HCAI 5231 Health Care Organization Theory and Management
Cases, concepts, and research findings in health care organizational behavior and administration. Analysis of the impact of individuals, groups, and organizational structure and environment on management performance. The topics of power and leadership are covered in other required courses. Available only to two-year Executive Program students.

HCAI 5233 Information Technology and the Management of Health Care Organizations
As information systems and information technology continue to evolve, health care managers must have a conceptual and operational understanding of the ways that technology can enhance both the delivery and management of health care services. This course will explore how health care organizations can utilize information systems and technology to integrate strategic management with clinical and web-based functions, assess organizational effectiveness, improve clinical care, and achieve patient safety goals.

HCAI 5270 Health Administration Ethics
An analysis of health care issues through lecture, case study, and practitioner involvement. Emphasis on overseeing the moral mission of health institutions while at the same time maintaining the economic viability of those institutions. Available only to two-year Executive Program students.

HCAI 5301 Managerial Accounting
Concepts and techniques of managerial accounting for generalist health care administrators. Emphasizes managerial accounting applications for using financial data as a tool for management planning and decision making in health care. Topics covered include financial accounting, cost accounting, source of revenues, budgeting and control, pricing, and profitability determination. Available only to two-year Executive Program students.

HCAI 5313 Economic Aspects of Health Care Administration
Application of economic concepts to the health care sector. Demand and supply, elasticity, health insurance, regulation, competition, and cost-effective analysis. Emphasis on use of economic analysis for strategic planning.

HCAI 5330 Health Services Organization and Policy
An overview of the organization, delivery, financing, and evaluation of the U.S. health care system. Emphasis is on major system components and their inter-relationships. Key concepts include social values, health personnel, health facilities, major financing, mechanisms, and health policy.

HCAI 5333 Legal Aspects of Health Care Administration
The legal principles and processes influencing health care providers. Basic instruction in contract law and tort law. Focus on major health care liability producing areas and interface between law and ethics.

HCAI 5340 Managerial Epidemiology
Managerial epidemiology is the application of the principles and tools of epidemiology to the decision-making process. It applies analytic techniques to the management of health services through the study and measurement of the health of populations. Topics include population health appraisals, determinants of health and disease, health status measurement, health service use, and design and evaluation of health care interventions. Available only to two-year Executive Program students.

HCAI 5353 Financial Management for Health Care Administration
Practical and theoretical aspects of the decision-making process in the financial management of health care facilities and systems. Topics include: price level problems; financial statement analysis and interpretation; evaluation of methods of hospital financing.

HCAI 5360 Leadership Effectiveness
This course will analyze managerial leadership models and the exercise of power in the health care setting. These managerial concepts will be assessed for their effectiveness in guiding managerial behavior in professional-dominated organizations and in assisting health care managers in carrying out essential tasks dealing with conflict in organizations and effecting organizational change. This course available only to two-year Executive Program students.

HCAI 5380 Health Care Human Resources Management
Analysis of health manpower; professional, technical, and continuing education; credentialing; and emerging directions in strategic human resource management. The recruitment, selection, compensation, retention, and performance evaluation of health manpower; the role of independent contractors of services; and the impact of federal legislation such as NLRA, FLSA, OSHA, EEOA, and ERISA.

HCAI 5451 **Seminar in Strategic Management of Health Services**
This integrative seminar focuses on the management of health care organizations from a strategic perspective. The various tenets of strategic management will be explored and then applied to various health care organizations. Special emphasis is placed on organization responses to new trends and changing circumstances. Students will be expected to draw on skills and knowledge introduced earlier in the curriculum. Efforts will be made to include the viewpoints of health care practitioners. Available only to two-year Executive Program students.

HCAI 5456 **Seminar in Strategic Planning and Marketing**
This course is designed to provide knowledge and skills pertaining to the function of strategic planning, marketing, and business plans in the health care setting. These will be applied to the line or staff manager in the health care setting whose responsibilities center upon management functions other than an assignment as a planning or marketing specialist. This course only available to two-year Executive Program students.

UNDERGRADUATE

HCAD 3333 **Health Economics**
An introduction to the application of the tools of microeconomics to issues in the organization, delivery, and financing of health care. Economic analysis will be utilized to better understand critical issues in health care such as the level and growth of health expenditures, the role of the government versus the private sector in financing care, the relationships between doctors, hospitals, insurance providers, patients, and employers, and the role of society in providing for the uninsured. (Also listed as ECON 3333.)
Prerequisite: ECON 1311 or consent of instructor.

HCAD 3350 **The U.S. Health Care System**
The course examines the development, organization, and evolution of the U.S. Health Care System and analyzes the impacts of major changes in that system on the values and behavior of both consumers and providers of health care services. Special emphasis is placed on the influence that our nation's second largest "business" has in contemporary society, and on the human consequences of that influence.
Prerequisite: Junior standing.

HCAD 3383 **Management of Health Care Organizations**
This course provides the unique knowledge and skills necessary to understand and effectively manage individuals and groups in challenging health care organizations such as hospitals, medical group practices, and nursing homes. The focus is on developing a theoretical and practical approach to managerial functions as related to dealing with health care professionals and workers, developing a conceptual understanding of the health care system in which the organization operates, and understanding the relationship between the organization, its regulatory environment, and the reimbursement system. Case studies are used to provide real-world applications relevant to health care management. (Also listed as MGMT 3383.)
Prerequisite: Junior standing.

HCAD 3-91 **Special Topics**
Special topics or contemporary issues in health care administration, including new forms of health services organization, management, delivery, or financing. Permission of the instructor is required. May be repeated on different topics.

HISTORY

DONALD N. CLARK, Ph.D., Professor
ANENE EJIKEME, Ph.D., Assistant Professor
ALLAN O. KOWNSLAR, D.A., Professor
CAREY H. LATIMORE IV, Ph.D., Assistant Professor
DAVID W. LESCH, Ph.D., Professor; Chair
KENNETH LOISELLE, Ph.D., Assistant Professor
NICOLE MARAFIOTI, Ph.D.*, Assistant Professor
JOHN J. McCUSKER, Ph.D., Ewing Halsell Distinguished Professor of American History
LINDA K. SALVUCCI, Ph.D., Associate Professor
TERRY L. SMART, Ph.D., Professor

OTHER FACULTY TEACHING HISTORY COURSES

ERWIN F. COOK, Ph.D., T. Frank Murchison Distinguished Professor of Classical Studies
TIMOTHY M. O'SULLIVAN, Ph.D., Associate Professor of Classical Studies
RICHARD J. SALVUCCI, Ph.D., Professor of Economics

THE MAJOR

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

I. The common curriculum

II. Departmental requirements:

31 semester hours in history including a 4000 level seminar that serves as the Senior Experience for the major, and one course from each of these three areas: (a) United States history; (b) European history; (c) Asian, Middle East, Latin American history, and African history. A maximum of 12 hours from 1000 level courses may count toward the major.

III. Electives sufficient to total 124 semester hours.

THE MINOR

The requirements for a minor in history are as follows:

I. 18 semester 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

The following courses serve as introductions to broad areas of historical study; they are generally taken in the first or second year, but are open to all students.

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.

Ancient Greece and Rome

HIST 1310 **Ancient Greece and Rome**
A historical introduction to selected aspects of the political, cultural, and intellectual life of the Greek and Roman world, with particular attention to the Greek and Roman contribution to western civilization.

HIST 1311 **Gender and Identity in the Ancient World**
An examination of the roles of women and men in society, religion, and culture of the ancient world. Readings will include historical, religious, medical, legal, philosophical, and literary texts. Representations of men and women in the visual arts will also be considered. (Also listed as CLAS 1307.)

HIST 1312 **Greeks, Romans, and Barbarians**
This course gives students an opportunity to examine the cultures and achievements of peoples labeled “barbarians” by the ancient Greeks and Romans. Students will use a broad selection of historical documents originating from the Near East, Egypt, Greece, and Rome, as well as the results of archaeological research, for investigating the social structures and values of these cultures. Critical methods for interpreting ancient and modern evidence about these societies will also be discussed. Also listed as CLAS 1312.

Asian History

HIST 1320 **History of China**
China from the bronze age through the communist revolution, with special emphasis on institutions, social and family life, philosophy and religion, and the effects of revolution and modernization. Survey readings supplemented by primary sources and a research component.

HIST 1324 **Modern East Asia**
A survey of the East Asian region since 1800 that addresses the modern histories of China, Japan, Korea, and Vietnam. The course begins with late traditional patterns and covers the stresses of imperialism and colonialism, the emergence of revolutionary independence movements, Communism, and the ordeals of war and economic modernization.

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 1334 **Early Modern Europe (1500-1815)**
Chief cultural and political developments from the Renaissance through the Napoleonic Empire, including the Reformation, Counter Reformation, Thirty-Years War, Puritan Revolution, rise of absolute monarchy, the Enlightenment, and the French Revolution. Special emphasis on religion and social change, church-state relations, ideals of religious reform, and critiques of religion itself.

HIST 1335 **Modern Europe**
Chief economic, political, and social developments in European society since 1815, including the Industrial Revolution, Marxism, the Russian Revolution, political and economic imperialism, World Wars I and II, the Great Depression, and the rise of totalitarian states.

Latin American History

HIST 1140 **Preceptorial in Latin American Cultural Traditions**
This one-hour course provides enrichment for interested students in HIST 1340 (Latin American Cultural Traditions). The preceptorial meets once a week for 50 minutes to discuss primary sources, such as written documents, maps, images, or literature. Special attention will be given to writing.
Co-requisite: Students must be enrolled concurrently in HIST 1340.

HIST 1340 **Latin American Cultural Traditions**
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 America, Iberia, and Africa are studied as are the historical processes that created “new” world cultural traditions in Latin America. Interested students may register concurrently for HIST 1140 (Preceptorial in Latin American Cultural Traditions).

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.

United States History

Students may not count more than two lower-division U.S. history courses for credit for either the major or the minor. One of these courses must cover the period through Reconstruction; the other must cover the period since Reconstruction.

HIST 1360 The History of the United States Through Reconstruction
An integrative survey of major political, economic, and social developments in the history of the United States of America from colonial settlement through the post-Civil War era of Reconstruction.

HIST 1361 The History of the United States Since Reconstruction
An integrative survey of the political, economic, and diplomatic history of the United States of America from Reconstruction to the present, emphasizing those factors most influential in shaping contemporary society.

HIST 1370 The African American Experience Through Reconstruction
This course focuses on the social, cultural, and political history of African Americans from approximately 1619 to 1877. Topics may include the genesis and evolution of Black slavery and freedom, the Revolutionary War, Nat Turner's Rebellion, and the Civil War and Reconstruction. Particular emphasis is placed on changing ideals of freedom and how African Americans struggled both to achieve and then redefine ever-evolving conceptions of freedom, whether understood politically, socially, or economically.

HIST 1371 The African American Experience Since Reconstruction
This course focuses on the social, cultural, and political history of African Americans from approximately 1877 to the present. Topics may include the genesis and evolution of Jim Crow, Black urban migration, the Harlem Renaissance, the Civil Rights Movement, and the Black Power Movements. Particular emphasis is placed on changing ideals of freedom and how African Americans struggled both to achieve and then redefine ever-evolving conceptions of freedom, whether understood politically, socially, or economically.

HIST 1375 Value Conflicts in American History Through Reconstruction
Use of critical methodologies to assess the conflicting value systems in pre-industrial America and the way social, political, and economic issues associated with those conflicts resulted in the formation of a U.S. national identity.

HIST 1376 Value Conflicts in Contemporary American History Since Reconstruction
Use of critical methodologies to assess the conflicting value systems prominent in post-industrial America and the way social, political, and economic issues illustrate value conflict.

UPPER-DIVISION COURSES

These are courses that assume varying degrees of preparation in the subject. Many classes require prerequisites or the consent of the instructor.

African History

HIST 3300 Gender Matters in African History
Focuses on the history of women in Africa from 1800 to the present. Topics may include the family, marriage, childhood, education, sports and recreation, work and the workplace, politics and political life, labor movements, and women's movements.
Prerequisite: HIST 1300 or consent of instructor.

HIST 3304 Religion in African History
Focuses on the role of religious identity in African history. Topics may include the histories of specific religious movements, the ways in which gender and leadership have intersected in new religious movements, the spread of Islam, Sufi orders, European missionary activities, African responses to non-African Christian missionizing, African missionary activities, and the interactions of different religious traditions and communities. Focus is on the period since 1800.
Prerequisite: HIST 1300 or consent of instructor.

Ancient Greece and Rome

HIST 3310 Archaic and Classical Greece
A study of Greek history from the age of colonization to the death of Alexander the Great (c. 750-323 B.C.), with emphasis on the social and political institutions of Athens and Sparta, relations between Persia and the Greeks, the period of the Peloponnesian War, and the rise of Macedon.

HIST 3314 The Mediterranean World in the Hellenistic Age
A study of the Hellenistic world, including Rome and Carthage, Ptolemaic Egypt, and the other Hellenistic kingdoms, with emphasis on the range of Hellenistic culture and the growing power of Rome, from the death of Alexander to the battle of Actium (323-31 B.C.).

HIST 3318 The Roman Empire
A study of the early Roman Empire (31 B.C.-A.D. 235), with the emphasis on the work of Augustus, the social and economic development in Italy and the provinces, the condition of the Roman world in the Antonine Age, and the rise of Christianity.

Asian History

HIST 3320 The Chinese Revolution
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.
Prerequisite: HIST 1320 or consent of instructor.

HIST 3324 History of Korea
A survey of Korean history from the archaeological record through source materials on the development of the Korean state, the Confucian culture of the Choson kingdom, and the multiple ordeals of modernization in the twentieth century.

European History

HIST 3330 The European Renaissance
This course examines the European Renaissance as a major turning point in Western culture. Students will explore aspects of the economic, political, social, cultural, and intellectual history in western Europe from the fourteenth to the early seventeenth century.
Prerequisite: 3 hours of European history or consent of instructor.

HIST 3332 Culture and Society in Early Modern Europe
Discussion-oriented course focusing on everyday life of ordinary people in 16th-18th century Europe. Topics include family life, sexuality, working conditions, pre-industrial economy, popular religion, and witchcraft. Introduction to a variety of historiographical approaches: Marxist, Annaliste, micro-historical, cultural, comparative, and those informed by gender theory.
Prerequisite: 3 hours of European history or consent of instructor.

HIST 3334 History of Russia
Major developments in the political history of Russian from the early tsars to the collapse of Communism.

HIST 3335 The Enlightenment
This course examines the Enlightenment as both an intellectual and cultural watershed moment in eighteenth-century life in the West. Students will explore the social and political thought of the period, looking at a variety of topics such as natural law theory, religious toleration and the critique of absolute monarchy. Time will also be devoted to examining the emerging cultural institutions in which such ideas took form and circulated from the second half of the seventeenth century to the French Revolution.
Prerequisite: HIST 1334 or consent of instructor.

HIST 3336 French Empire in the Americas, 1500-1800
Examination of French exploration and settlement in the Americas from the fifteenth century to the reign of Napoleon. Topics may include political, economic and cultural explanations for exploration, interaction with indigenes and slaves, daily life in the colonial era, and the growing tensions between France and other imperial powers.
Prerequisite: Any one of the following: HIST 1334, 1360, 1370, or 1375; or consent of instructor.

HIST 3337 History of France from the Old Regime to the Present
History of France from the rise of Louis XIV in 1661 to the modern day. The course will focus on the rise of the nation-state, the Enlightenment, the French Revolution, the struggle for democracy in the nineteenth century, the World Wars, the cultural revolution of 1968 and will conclude with a consideration of the political, economic and cultural challenges facing France today.

HIST 3339 The World War II Era
Rise of the dictators and the road to war, 1919-1939; World War II in Europe, Africa, and Asia; major Cold War events from 1945 to the death of Stalin.

Latin American History

HIST 3340 Latin American Perspectives
An examination of Latin American history through a study of 19th and 20th century texts from different social and ethnic groups; special attention to interpretations by Native Americans and African Americans.
Prerequisite: HIST 1340 or consent of instructor.

HIST 3344 Modern Brazil
The history of Brazil from 1500 to present. Topics include: slavery and race relations; family life; Indians and the Amazon; the changing Catholic Church.

HIST 3346 Modern Mexico
Mexico since independence with emphasis on Juárez and the Reform, the Díaz 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.)
Prerequisites: ECON 1311 and 1312.

Middle East History

HIST 3350 The Arab Cultural Tradition
Examination of significant cultural movements in Arab history from the medieval period to the present, including art, literature, architecture, music, and film.
Prerequisite: HIST 1350, 1351 or consent of instructor.

HIST 3354 The Persian-Arabian 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.

United States History

HIST 3360 **Economic and Business History of the United States to 1865**
A study of the development of American business and the economy through the U.S. Civil War. (Also listed as ECON 3344 and BUSN 3344.)
Prerequisites: ECON 1311 and 3 hours of U.S. history or consent of instructor.

HIST 3361 **Economic and Business History of the United States Since 1865**
A study of the development of American business and the economy from the U.S. Civil War to the present. (Also listed as ECON 3345 and BUSN 3345.)
Prerequisites: ECON 1311 and 3 hours of U.S. history or consent of instructor.

HIST 3362 **History of Early British America**
The history of early British America from the sixteenth through the eighteenth centuries, concentrating on the establishment and development of indigenous if disparate polities, societies and economies.
Prerequisite: At least one lower-division course in U.S. history through Reconstruction, or consent of instructor.

HIST 3363 **Early American Social History**
Discussion-oriented course focusing on the everyday life of ordinary people from the initial cultural contacts among Europeans, Native Americans, and Africans brought to the New World down through the Revolutionary period. Emphasis on the development and maturation of diverse mainland and island communities in British North America, as well as regional and temporal variations in gender, race, and class relations.
Prerequisite: At least one lower-division course in U.S. history through Reconstruction, or consent of instructor.

HIST 3365 **The American Revolution**
Historical interpretations of the period 1763-1793 with focus on the Stamp Act crisis, the final break and war with Great Britain, and state and national constitution-making.
Prerequisite: At least one lower-division course in U.S. history through Reconstruction, or consent of instructor.

HIST 3366 **The Civil War and Reconstruction**
This course focuses on the Civil War and Reconstruction as dramatic and defining episodes in American history. Students will examine the emerging sectional conflicts that led up to the war, the military and social history of the war itself, and Reconstruction, with particular attention given to the construction of "freedom" following the upheaval. The class will focus on race, class, gender, and the shaping of individual and collective identities.
Prerequisite: At least one lower-division U.S. history course, or consent of instructor.

HIST 3367 **American Life and Thought to 1900**
Changes in American life and thought, 17th through 19th centuries, as illustrated by topics such as Puritan society, the American Enlightenment, the Transcendentalists, and Social Darwinism.
Prerequisite: At least one lower-division U.S. history course, or consent of instructor.

HIST 3368 **Modern American Culture**
Historical survey of significant cultural, intellectual, and artistic movements in the 20th and 21st centuries U.S.
Prerequisites: At least one lower-division U.S. history course, or consent of instructor.

HIST 3369 **United States Diplomatic History**
A survey of key events, policies, personalities, and ideas that shaped American foreign relations between the late nineteenth century and the end of the Cold War.

HIST 3370 **Free Blacks in America**
This course traces the lives of free blacks in America from the early seventeenth century to the Civil War. The course examines free blacks in relation to the origins of American slavery, the Revolutionary War, black radicalism, community development, antebellum slavery, and the American Civil War. Attention will be given to issues of class, gender, and identity.
Prerequisite: At least one lower-division U.S. history course, or consent of instructor.

HIST 3372 **Black Images in Film**
Examines the depictions of blacks in American cinema from 1915 to the present. This course introduces students to the history of blacks in film and examines how film has been used as a tool of social and political commentary. Attention will be given to issues of race, color, class, and gender.
Prerequisite: At least one lower-division U.S. history course, or consent of instructor.

HIST 3374 **The Old South**
Historical developments in the South from the late sixteenth century through the Civil War. This course will examine the South in relation to such major topics as the Revolutionary War, slavery, and the rise and fall of the Confederacy. Attention will be given to issues of race, class, gender, identity, and political ideology.
Prerequisite: At least one lower-division U.S. history course, or consent of instructor.

HIST 3376 **History of Texas**
Spanish and Mexican periods; revolution and the Republic; social, political, and economic changes since statehood.

Historiography, Thematic, and Comparative History

These courses do not count towards the distribution requirement.

HIST 3381 **Historians and Their Craft**
A colloquium on selected current debates, schools, and conflicting approaches among historians. Critical discussion of emerging fields as

well as attention to on-going debates within more traditional historical scholarship. Especially appropriate for anyone considering history as a major.

HIST 3382 The City in History
Cross-cultural examination of urban life in the pre-industrial, industrial, and contemporary cities of Asia, Europe, and the Americas with special emphasis on the U.S. urban experience. Interdisciplinary perspective drawing upon history, political science, sociology, and urban planning for an understanding of the complexity of urbanization. (Also listed as URBS 3305.)

HIST 3384 Slavery and the Atlantic Economy
Interdisciplinary analysis of the Atlantic market joining Europe, Africa, and the Americas from the sixteenth through nineteenth centuries, with particular emphasis upon slavery, the slave trade, and the development of the "plantation complex." Makes explicit use of economic theory to explain historical change. (Also listed as ECON 3343.)
Prerequisites: ECON 1311 and HIST 1334 or HIST 1340, or consent of instructor.

Special Topics and Honors

These courses must be arranged with individual instructors and approved by the Chair.

HIST 3-90 Independent Study
Independent study in selected areas. 1 to 6 semester hours.
Prerequisites: 6 advanced hours in history and consent of instructor.

HIST 3388 Methods of Instruction in History
Examination of various ways to teach history at the elementary, secondary, or college levels with special emphasis on the inquiry process. Students will work with both original and secondary sources and develop an extensive teaching unit as a final project. Topics may include Texas, U.S., or world history.

HIST 3-92 Special Topics in History
From time to time the department will offer special topic courses not described in the *Courses of Study Bulletin*. Announcement of such courses will be by special prospectus. May be repeated on different topics.

HIST 4498 Honors Thesis First Semester
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 the first semester of their senior year.

HIST 4499 Honors Thesis Second Semester
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 the second semester of their senior year.

Seminars: The Senior Experience

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 4400 Seminar in African History

HIST 4420 Seminar in Asian History

HIST 4430 Seminar in European History

HIST 4440 Seminar in Latin American History

HIST 4450 Seminar in Middle East History

HIST 4460 Seminar in United States History A

HIST 4470 Seminar in United States History B

AMERICAN INTERCULTURAL STUDIES

FACULTY ADVISORY COMMITTEE:

WILLIAM T. BURKE III, J.D., Associate Professor, Business Administration; Chair
JORGE G. GONZALEZ, Ph.D., Professor, Economics
L. BROOKS HILL, Ph.D., Professor, Speech and Drama
ARTURO MADRID, Ph.D., Norine R. and T. Frank Murchison Distinguished Professor of the Humanities, Modern Languages and Literatures
PETER O'BRIEN, Ph.D., Professor, Political Science
RICHARD K. REED, Ph.D., Professor, Sociology and Anthropology

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

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

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

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

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

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. SPCH 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: 1) The Harlem Renaissance 2) The American Bildungsroman
GNED 3325	The U.S. Latino Experience
GNED 3326	U.S. Latino Cultural and Artistic Expression
HIST 1340	Latin American Cultural Tradition
HIST 1370	The African American Experience Through Reconstruction
HIST 1370	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 (bilingüe) (also listed as SOCI/INTL 3343)
HIST 1360	The History of the United States Through Reconstruction
HIST 1361	The History of the United States Since Reconstruction
HIST 3363	Early American Social History
HIST 3368	Modern American Culture
INTL 3343	Relaciones fronterizas México-Estados Unidos (bilingüe) (also listed as SOCI/ANTH 3343)
PLSI 3352	Civil Rights and Liberties
PSYC 3341	Social Psychology
RELI 1360	Religion in the United States
SOCI 3328	Social Inequality (also listed as URBS 3328)
SOCI 3343	Relaciones fronterizas México-Estados Unidos (bilingüe) (also listed as ANTH/INTL 3343)

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

INTERDISCIPLINARY SECOND MAJOR

FACULTY ADVISORY COMMITTEE:

DUANE COLTHARP, Ph.D., Associate Professor, English; Associate Vice President for Academic Affairs
CHRISTINE DRENNON, Ph.D., Associate Professor, Sociology and Anthropology
J. PAUL MYERS, JR., Ph.D., Professor, Computer Science
DEBRA OCHOA, Ph.D., Assistant Professor, Modern Languages and Literatures
EUGENIO D. SUAREZ, Ph.D., Associate Professor, Business Administration

The Interdisciplinary Second Major (ISM) allows students to pursue a unique learning path that integrates material from several disciplines. Working with a variety of faculty members, each student designs a comprehensive curriculum for rigorous study of a specific topic or intense training in a closely defined area.

The ISM is designed for students who have already declared a primary major in an existing program. Students may not use the ISM to achieve a second, and different, bachelor's degree.

Requirements

a. Each proposed major must have an advisory committee of three faculty members representing two or more different disciplines, one of whom will be chair.
b. The advisory committee will help the student prepare a proposal for the major, select courses, and develop a course that synthesizes the diverse work of the major (normally, an existing three-hour independent study course directed by a member of the faculty advisory committee).
c. In order to submit a proposal for an Interdisciplinary Second Major, a student must have already declared a first major.
d. The proposal should identify at least twelve (12) hours of courses that will serve as a core for the major and an array of supporting courses from which the remaining credits will be chosen. One of the core courses must be the synthesis course.
e. The minimum number of hours for an interdisciplinary major is thirty-six (36). Of that number, at least eighteen (18) must be upper-division. No more than eighteen (18) hours may be taken from a single discipline. No more than nine (9) hours may be selected from courses that are used towards the student's first major.
f. The selection of courses must ensure depth in the area of study as well as breadth of exposure to varied perspectives.

Procedures

a. A student who wishes to pursue an Interdisciplinary Second major must submit a proposal before the end of the second semester of the junior year. The proposal form may be obtained from the Office of the Registrar.
b. The Interdisciplinary Second Major Committee will consider this proposal and, if approved, will recommend it to the University Curriculum Council for final approval.
c. The advisory committee will monitor the student's progress toward the major, provide guidance, and evaluate any changes to the course of study.
d. Upon registration for the last semester of courses taken toward the Interdisciplinary Second Major, the student must submit a form for completion of an Interdisciplinary Second Major to her or his advisory committee. The completion form may be obtained from the Registrar. The committee will then return that form, if approved, to the Registrar and will forward a copy of the form to the Interdisciplinary Second Major Committee and the University Curriculum Council.
e. During the semester in which the student completes the coursework for the major, he or she will make a public presentation to his or her advisory committee in order to demonstrate a mastery of the interdisciplinary topic. This presentation must be organized in conjunction with the student's synthesis course.

INTERNATIONAL STUDIES

DONALD N. CLARK, Ph.D., Professor, History; Coordinator, East Asian Studies
ANENE EJIKEME, Ph.D., Assistant Professor, History; Coordinator, African Studies
STEPHEN L. FIELD, Ph.D., Professor, Modern Languages and Literatures
ROBERT HUESCA, Ph.D., Professor, Communication; Director
RUQAYYA Y. KHAN, Ph.D., Associate Professor, Religion; Coordinator, Middle East Studies
NANETTE LE COAT, Ph.D., Associate Professor, Modern Languages and Literatures; Coordinator, European Studies
DAVID O. RIBBLE, Ph.D., Professor, Biology; Coordinator, International Environmental Studies
DAVID SPENER, Ph.D., Associate Professor, Sociology; Coordinator, Latin American and Latino Studies
MARY ANN TÉTREAULT, Ph.D., Una Chapman Cox Distinguished Professor of International Affairs, Political Science; Coordinator, International Affairs Concentration
DARRYL G. WALDRON, Ph.D., Professor, Business Administration

INTERNATIONAL STUDIES PROGRAM

International Studies is an interdisciplinary undergraduate degree program that combines broad approaches to world affairs, foreign language learning, experience abroad, and specialized studies in one of the regional or functional concentraitons.

THE MAJOR

The requirements for a Bachelor of Arts with a major in International Studies are as follows:

I. The common curriculum

II. Program requirements

A. No fewer than 33 semester hours.
B. Advanced Language study (at least 6 upper division hours). This requirement in the Middle East and East Asian Studies concentrations may be modified in special circumstances upon recommendation of the advisor and the consent of the International Programs director.
C. One of the following courses: HIST 3369 (U.S. Diplomatic History), PLSI 1331 (Comparing Countries), or SOCI/URBS 1316 (Introduction to Human Geography).
D. Required enrollment during each semester of residence in the major in INTL 3100 (International Studies Colloquium). Course may be repeated for 6 hours, only 3 of which may be applied to the major.
E. Concentrations (15-18 hours including courses taken while abroad).
International Studies concentrations are individual programs of study that are designed by students in consultation with the appropriate concentrations advisor. A student may propose courses from the concentration list (below), or with the approval of the advisor and program director, from among courses taken abroad or unlisted courses taken while at Trinity.
F. The Senior Experience may be satisfied in one of three ways after being proposed by the student and approved by the student's advisor:
The Senior Research Project (INTL 4-00)
A university-approved Senior Experience in another department that contains a significant International Studies component.
A university-approved Senior Interdisciplinary Seminar that contains a significant International Studies component.

III. Electives sufficient to total 124 semester hours.

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

Students are strongly encouraged to take courses in the Languages across the Curriculum Program.

Study Abroad recommended, with the advice of the major advisor and study abroad advisor.

THE MINOR

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

I. Completion of no fewer than 21 semester hours.

II. The lower division sequence in an appropriate foreign language (the equivalent of four college semesters). This requirement in the Middle East and East Asian Studies concentrations may be modified in special circumstances upon recommendation of the advisor and the consent of the International Programs director.

III. One of the following courses: HIST 3369 (U.S. Diplomatic History), PLSI 1331 (Comparing Countries), or SOCI/URBS 1316 (Introduction to Human Geography).

IV. Required enrollment during each semester of residence in the minor in INTL 3100 (International Studies Colloquium). Course may be repeated for 6 hours, only 3 of which may be applied to the minor.

V. Concentrations (12-15 hours including courses taken while abroad).
International Studies concentrations are individual programs of study that are designed by students in consultation with the appropriate concentrations advisor. A student may propose courses from the concentration list (below), or with the approval of the advisor and program director, from among courses taken abroad or unlisted courses taken while at Trinity.

VI. At least 9 hours must be upper division.

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

Study Abroad recommended, with the advice of the minor advisor and study aborad advisor.

THE CONCENTRATIONS

International Studies concentrations are individual programs of study that are designed by students in consultation with the appropriate concentration advisor. A student may substitute courses taken abroad or special offerings that are not shown on the lists upon recommendation of the advisor and approval by the program director.

Concentrations and Faculty (*concentration coordinator and head advisor)

African Studies ……..…….	Professor Anene Ejikeme*
East Asian Studies ……..	Professors Donald N. Clark* Stephen L. Field Randall Nadeau
European Studies…….	Professors Rita Kosnik Nanette Le Coat* Heather Sullivan
Latin American and Latino Studies……	Professors Arturo Madrid Pablo Martínez David Spener*
Middle East Studies ……..……..	Professors Ruqayya Y. Khan* David Lesch Sussan Siavoshi
International Affairs ……..…...	Professors Richard V. Butler Peter O'Brien Mary Ann Tétreault*
International Environmental Studies…..…	Professors Richard Reed David Ribble*

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; 3) 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. The course is offered on a Pass/Fail basis only.

INTL 2102 Preparing for Study Abroad

A one-credit course for students preparing to study abroad (or away) for academic credit. Includes academic planning including written proposals for student abroad; program selection and logistical planning for the time away; pre-departure orientation; studies of cross-cultural communication and adjustment; guided individual country studies and studies of U.S. relations with the proposed host country. The course should be taken the semester immediately preceding the planned study abroad (or away) experience. The course is offered on a Pass/Fail basis only.

INTL 3100 International Studies Colloquium

The Colloquium is a weekly meeting of all majors and minors in the program. Under the direction of an assigned faculty member the sessions include discussions of world affairs; presentations by students, faculty members, and other guests; reports from affiliated student groups; presentations on careers and graduate school opportunities; and reports from seniors about their Senior Experience. Offered each semester. Required of all International Studies majors and minors while in residence in the program up to a maximum of six hours credit, only three of which may be counted toward the major.

INTL 3103 Returning from Study Abroad

A one-credit course for students returning from study abroad that is designed to help students maximize the benefit of their study abroad experiences and to help them readjust to the U.S. and university culture. Students will reflect upon and integrate their experiences in relation to their academic interests and various facets of university life. The course is offered on a Pass/Fail basis only.

INTL 4-01 International Studies Internship

Between one and three hours of credit may be arranged for appropriate international internships that are undertaken while abroad if they meet academic criteria set by the Committee. Credit may also be arranged for internships in San Antonio during the school year and away, during the summer, with the approval of the International Programs director.

INTL 4-02 Special Topics in International Studies

From time to time the International Studies program will present special topic courses not described in the Courses of Study Bulletin. Announcements of such courses will be by special prospectus. May be repeated on different topics.

INTL 4103 Model United Nations

Students chosen for the Trinity delegation to national Model United Nations competitions are required to register for this one-hour course. The course involves participation in parliamentary training sessions, learning about the country being represented by the Trinity delegation, and research and writing on the topics before the various Model United Nations committees. May be repeated for credit in successive years.

THE SENIOR EXPERIENCE

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

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.

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 pre-registration course schedule under International Studies.

Students may earn a Spanish across the Curriculum certification by successfully completing advanced work in Spanish and a series of courses listed in the Spanish across the Curriculum Program. This certification will be indicated on the student's official transcript. The requirements are:

SPAN 3301 ("Advanced Grammar") or the equivalent
3 semester hours of upper-division Spanish electives
4 Spanish across the Curriculum courses or 7 credit hours in Spanish across the Curriculum courses

INTL 3101 La economía mexicana (The Mexican Economy)

An examination of the most significant contemporary issues affecting the economic life of Mexico. The international, agricultural, financial, communications, and labor sectors of the economy are analyzed in depth, and their relationship to the macroeconomic performance of the country is studied. Special attention is given to the political situation of the country and its impact on the economy. This course will be conducted entirely in Spanish. (Also listed as ECON 3141.)
Prerequisites: SPAN 2302, ECON 1311 and 1312 or 3318 or consent of instructor.

INTL 3104 La experiencia latina en los Estados Unidos (The U.S. Latino Experience)

An examination of the historical experience and cultural expression of the Latino population of the United States, with attention to the role of U.S. foreign policy in creating Latino communities, the impact of domestic policy on the various sub-groups, the evolution of U.S. Latino cultural expression, and the changing relationship of Latinos to U.S. society and its institutions. This course will be taught entirely in Spanish and is designed to accompany GNED 3325.
Prerequisites: SPAN 2302, the equivalent, or consent of instructor; and students must have completed, or be enrolled in, GNED 3325.

INTL 3107 La telenovela en América Latina (The Latin American Soap Opera)

An examination of the Latin American telenovela, or soap opera, from the perspectives of development communication, popular culture, and international television. This course will be conducted entirely in Spanish. (Also listed as COMM 3120.)
Prerequisite: SPAN 2302, the equivalent, or consent of instructor.

INTL 3110 La música popular latinoamericana (Latin American Popular Music)

A study of Latin American culture through popular music, this course will explore both musical forms and lyrics. Musical forms include bolero, tango, balada, cumbia, salsa, rumba, and merengue. The multilayered messages in the lyrics will be analyzed for social and political insights into Latin American culture. This course will be conducted entirely in Spanish.
Prerequisite: SPAN 2302, the equivalent, or consent of instructor.

INTL 3111 Narody Rossii (The Peoples of Russia)

A companion course to ML&L 3342, which introduces Russian culture from medieval through modern times, including not only the Russians, but also the peoples of southern and eastern Russia. The course will emphasize religion, folklore, and art through a series of short Russian-language readings and weekly discussions. The course will be conducted entirely in Russian.
Prerequisite: RUSS 2302 or the equivalent. INTL 3111 is designed to be taken concurrently with ML&L 3342 (The Peoples of Russia), although it may be taken separately with consent of instructor.

INTL 3112 Shangye Zhongwen (The Practice of Business in China)

A study of cultural concepts and customs that have influenced contemporary Chinese business practices and behaviors, through the use of readings and weekly discussions. The course will be conducted entirely in Chinese.
Prerequisite: CHIN 2302 or the equivalent.

INTL 3114 Zhongguo Gudai Sixiang (Classical Chinese Thought)

A study of traditional Chinese thought as manifested in the language of selected classical texts of history, philosophy, poetry, and religion. All readings will be conducted in classical Chinese. No prior knowledge of Chinese is required.
Corequisite: Simultaneous enrollment in a Chinese civilization, literature, history, philosophy, political science, or religion course, or consent of instructor.

INTL 3117 Teorii I iskusstvo russkogo avangarda (Theories and Art of the Russian Avant-Garde)

A companion course to ARTH 3362, which is a survey of the main artistic movements and artists in Russia from 1880-1930: Symbolism, Primitivism, Futurism, Suprematism, Constructivism. The course will pay special attention to the works of Vrubel, Goncharova, Malevich, Kandinsky, and Filonov through slides, a series of short Russian-language readings, and weekly discussions. The course will be conducted entirely in Russian. INTL 3117 is designed to be taken concurrently with ARTH 3362 (Russian Avant-Garde Art), although it may be taken separately with consent of instructor.
Prerequisite: RUSS 2302 or the equivalent.

INTL 3118 Historia, resistencia y rebellion en la musica chicana (History, Resistance, and Rebellion in Chicana/o Music)

A study of important historical events and issues of resistance against racism, classism, and the economic exploitation of Chicanas and Chicanos through samples of the music produced by them throughout the 20th century. The course will analyze both musical forms and lyrics. The musical genres will include corridos (ballads), Pachuca and Pachuco (zootsuiter) music, Rock 'n Roll, Civil Rights movement

music, Chicana/o Punk, Mariachi, Tejano, and Conjunto music among other styles. This course will be conducted entirely in Spanish.
Prerequisite: SPAN 2302 or equivalent.

INTL 3119 Identidades juveniles en Latinoamérica: Música contemporánea y expresiones artisticas urbanas (Youth Identities in Latin America: Contemporary Music and Urban Artistic Expression)
This course will emphasize how contemporary music from different Latin American singers (or groups) and popular arts play a significant role in the process through which youth cultures configure their worlds. The course will be conducted exclusively in Spanish.
Prerequisite: SPAN 2302 or the equivalent.

INTL 3120 La historia cultural del baile latinoamericano (The Cultural History of Latin American Dance)
An examination of the cultural influences on contemporary Latin American dance, including dances of European, African, or mestizo origin, such as the cumbia, samba, tango, waltz criollo, polka, salsa, merengue, and vallenato, as well as indigenous dances such as the cueca, huayno, diablada, and morenada. This course will be taught entirely in Spanish and will include demonstrations of the several dance steps. (Also listed as ANTH 3120.)
Prerequisite: SPAN 2302 or the equivalent.

INTL 3121 Las matemáticas en las ciencias sociales (Mathematics in the Social Sciences)
This course will examine a number of concepts, tools, and methods useful for modeling problems in the social sciences. Among the specific topics to be considered are the mathematics of voting, Arrow's impossibility theorem, the notion of power, methods of fair division and apportionment, and the mathematics of conflict and escalation. The level throughout will be elementary and there are no formal mathematical prerequisites. The course will be conducted entirely in Spanish.
Prerequisite: SPAN 2302 or the equivalent.

INTL 3122 Faust – auf Deutsch (Faust – in German)
A companion course to ML&L 3320, which deals with major German figures and movements in the context of Western literary, political, and cultural history.
Prerequisite: GERM 2302 or the equivalent. INTL 3122 is designed to be taken concurrently with ML&L 3320. The course may be taken separately with consent of instructor.

INTL 3124 L'histoire française: un parcours cinématographique (French History through Film)
Moving chronologically through the centuries, this course will explore key historical moments in French culture through film. The course will be conducted entirely in French.
Prerequisite: French 2302 or the equivalent.

INTL 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.

INTL 3133 La República Dominicana: Una introducción (An Introduction to the Dominican Republic)
As an introduction to the Dominican Re public, this course includes information on the history, politics, economy, society, literature, arts, and culture of the island nation. The course draws on academic and literary texts in Spanish, as well as on slides, audiovisual recordings, food, and other resources to explore the various themes. This course will be conducted entirely in Spanish.
Prerequisite: SPAN 2302, the equivalent, or consent of instructor.

INTL 3308 Una breve historia de América Latina en el siglo XX a través de su música popular (A Concise 20th Century History of Latin America Through its Popular Music)
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.

INTL 3340 Haciendo negocios en Latinoamérica (Doing Business in Latin America)
This course is both a language and an applied business course. On the language part, it is intended to increase the Spanish proficiency in reading, writing, and speaking. The other aspect of the course includes a thorough understanding of cultural, political, and economic aspects of the Latin American business environment. Moreover, the course will immerse the student in the intricacies of exporting to, importing from, establishing a new business in, or operating a foreign branch in a Latin American country.
Prerequisites: ECON 1311, Spanish proficiency, and consent of instructor. (Also listed as BUSN 3340.)

INTL 3343 Relaciones fronterizas México-Estados Unidos (bilingüe)
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 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.)
Prerequisites: SPAN 2302, the equivalent, and consent of instructor.

INTL 3346 La economía española y la Unión Europea (The Spanish Economy and the European Union)
An examination of Spain's economic development and its position within the European Union. The business, economic, and political transformation of Spain from a struggling nation with an authoritarian regime to an economic power with an open and democratic society are studied. The course also examines the development of the 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 NGOs in Spain. (Also listed as BUSN 3346, ECON 3346, and SPAN 3346.)
Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of instructor.

INTL 3372 Práctica profesional en España (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 BUSN 3372, ECON 3372, and SPAN 3372.)

Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of instructor.

CONCENTRATION COURSE REQUIREMENTS

CONCENTRATIONS (*coordinator and head advisor)

AFRICAN STUDIES (Professor Anene Ejikeme*)

African Studies focuses on the study of the historical experience of the peoples of Africa as well as the social, political, economic, and religious institutions and practices of Modern African states. The concentration invites exceptional students to combine courses at Trinity with study abroad to address in an integrative fashion the evolution of the African experience.

Requirements: Eighteen hours, including at least one semester of study abroad in Africa. Students will satisfy the International Studies language requirement as noted below. Students may substitute courses abroad or other special course offerings for comparable courses in the Concentration list

Language (6-9 hours): Will be satisfied by either of the following options:
6 hours in an African language, which may include Arabic
OR
6 upper-division hours in French or Portuguese and at least 3 hours in the study of an African language, which may include Arabic
Concentration Courses (9-12 hours): Selected from the following lists:

Required Course List (3 hours)

HIST 3300	Gender Matters in African History
HIST 3304	Religion in African History
HIST 3308	Imperialism in Africa

History and Religion List (3 hours)

HIST 1300	The African Experience
HIST 1350	Medieval Islamic History, 570-1517
HIST 3384	Slavery and the Atlantic Economy
RELI 1340	Islam, Judaism, and Christianity
RELI 3343	The Islamic Tradition
RELI 3345	Women in Islam
RELI 3346	Islamic Literatures

Anthropology and Political Science List (3 hours)

ANTH 3358	The Anthropology of International Relations
PLSI 1332	Film, Literature, and Politics of the Third World
PLSI 1341	The Individual in World Politics
PLSI 3348	The Politics of Development

Special Topics courses from departments may be included as concentration courses when topics pertain to Africa.

Study Abroad (6-9 hours): To be taken while studying abroad, selected in consultation with the concentration coordinator. Note: These hours do not include the hours devoted to the study of African languages including Arabic.

EAST ASIAN STUDIES (Professors Donald N. Clark*, Stephen L. Field, and Randall Nadeau)

Among the courses taken, the student must take at least one course in each of the following departments: History, Religion, and Political Science.

Art History

ARTH 1310	Introduction to Asian Art: China
ARTH 1311	Introduction to Asian Art: Japan
ANTH 1303	Japanese Perspectives (GNED 1303, ML&L 1303)

Business Administration

BUSN 3330	The Culture of Business in China (CHIIN 3330)

General Education

GNED 1303	Japanese Perspectives (ANTH 1303, ML&L 1303)

History

HIST 1320	History of China
HIST 1324	Modern East Asia
HIST 3320	The Chinese Revolution
HIST 3324	History of Korea

Modern Languages and Literatures

CHIN 2311	Chinese Civilization
CHIN 3312	Chinese Cinema: A Historical and Cultural Perspective (ML&L 3303)
CHIN 3330	The Culture of Business in China (BUSN 3330)
CHIN 4321	Topics in Modern Chinese Literature
CHIN 4351	Classical Chinese
CHIN 4-91	Selected Topics
ML&L 1303	Japanese Perspectives
ML&L 3301	Chinese Literature in Translation I
ML&L 3302	Chinese Literature in Translation II
ML&L 3303	Chinese Cinema: A Historical and Cultural Perspective (CHIN 3312)
ML&L 3330	Japanese Literature in Translation

Philosophy

PHIL 1302	Introduction to Asian Philosophy
PHIL 3328	The Philosophies of China

Political Science

PLSI 3331	Political Economy of the U.S, Europe, and Japan

Religion

RELI 1330	Asian Religions
RELI 3332	The Buddhist Tradition
RELI 3333	Chinese Religions
RELI 3334	Japanese Religions

EUROPEAN STUDIES (Professors Rita Kosnik, Nanette Le Coat*, and Heather Sullivan)
Among the courses taken, the student must take at least one course in each of the following departments: History, Religion, and Political Science.

Art History

ARTH 1308	Art History II: Renaissance to Modern Art
ARTH 3347	Art of the Eighteenth Century
ARTH 3350	Neo-Classicism to Realism
ARTH 3360	Twentieth Century Art

Economics

ECON 3343	Slavery and the Atlantic Economy (HIST 3384)
ECON 3351	Development of Economic Thought

English

ENGL 2301	British Literature: Epic to Romantic
ENGL 2302	British Literature: Romanticism and After
ENGL 3320	Modern Drama (DRAM 3336)
ENGL 3367	British Literature: 1900-Present

History

HIST 1334	Early Modern Europe (1500-1815)
HIST 1335	Modern Europe
HIST 3332	Culture and Society in Early Modern Europe
HIST 3334	History of Russia
HIST 3382	The City in History
HIST 3384	Slavery and the Atlantic Economy (ECON 3343)

Modern Languages and Literatures

FREN 3303	French Civilization
FREN 3305	Introduction to French Literature I
FREN 3306	Introduction to French Literature II
GERM 3305	Introduction to German Literature I
ML&L 3340	Russian Literature in Translation I
ML&L 3341	Russian Literature in Translation II
RUSS 3303	Russian Culture
RUSS 3305	Introduction to Russian Literature I
RUSS 3306	Introduction to Russian Literature II
SPAN 3311	Spanish Civilization
SPAN 3331	Introduction to Spanish Literature
SPAN 4334	Nineteenth-Century Spanish Literature
SPAN 4336	Twentieth-Century Spanish Literature

Music

MUSC 3341	Music History and Literature I
MUSC 3342	Music History and Literature II

Philosophy

PHIL 3322	Classical Modern Philosophy
PHIL 3323	Nineteenth Century Philosophy I

Political Science

PLSI 3330	European Politics
PLSI 3331	Political Economy of the U.S., Europe, and Japan
PLSI 3362	Modern Political Thought
PLSI 3363	Masters of Suspicion: Contemporary Political Thought

Religion

RELI 3341	The Jewish Tradition
RELI 3342	The Christian Tradition
RELI 3343	The Islamic Tradition

Sociology and Anthropology

ANTH 3358	The Anthropology of International Relations

Speech and Drama

DRAM 3336	Modern Drama (ENGL 3320)

LATIN AMERICAN AND LATINO STUDIES (Professors Arturo Madrid, Pablo Martínez, and David Spener*)

Requirements: Eighteen hours, including one of the introductory courses and at least one from each of the three main tracks below. Students may substitute courses abroad or other special course offerings for comparable courses in the tracks. Students are strongly encouraged to take a Spanish across the Curriculum course in each of the tracks.

Introduction to Latin American/Latino Studies (one course)

GNED 3325	The U.S. Latino Experience
HIST 1140	Preceptorial in Latin American Cultural Traditions
HIST 1340	Latin American Cultural Traditions
SPAN 3312	Latin American Civilization

Art and Culture Track (at least one course)

ANTH 3357/	
ARTH 3335	Pre-Columbian Art of Mesoamerica
ANTH 3356	Seminar on the Ancient Maya
ARTH 3345	Spanish Colonial Art and Architecture in Mexico
ENGL 4323	Studies in American Literature: Literature and Culture in the Latina/o Borderlands
GNED 3326	U.S. Latino Cultural and Artistic Expression
RELI 3380	U.S. Latino Religious Practices and Traditions
SPAN 3322	Spanish American Cinema
SPAN 3332	Introduction to Spanish American Literature
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

Spanish Across the Curriculum Courses

COMM 3120/	
INTL 3107	La telenovela en América Latina
INTL 3108	Una breve historia de América Latina en el siglo XX a través de su música popular
INTL 3110	La música popular latinoamérica na
INTL 3120	La historia cultural del baile latinoaméricano
INTL 3133	La República Dominicana: una introducción

History, Economics, and Politics Track (one course)

ANTH 3358	Anthropology of International Relations
ANTH 3364	Economic Anthropology
ECON 3341	Economic Development of Mexico
ECON 3342	Latin American Economic History
ECON 3343	Slavery and the Atlantic Economy (HIST 3384)
HIST 3344	Modern Brazil
HIST 3346	Modern Mexico
HIST 3384	Slavery and the Atlantic Economy (ECON 3343)
PLSI 3333	Latin American Politics
SOCI/	
ANTH 4362	Globalization and International Development

Spanish Across the Curriculum courses

BUSN 3340	Haciendo negocios en latinoaméricana (INTL 3340)
INTL 3101	La economía mexicana
INTL 3121	Las matemáticas en las ciencias sociales
SOCI/ANTH/	
INTL 3343	Relaciones fronterizas: México-Estados Unidos (bilingüe)

Race, Ethnicity, and Gender Track (at least one course)

ANTH 3367	South American Indigenous Peoples: Conquest and Development
HIST 3340	Latin American Perspectives
SPAN 3332	Introduction to Spanish American Literature
SPAN 4348	Spanish America Women Writers

Spanish Across the Curriculum Courses

INTL 3104	La experiencia Latina en los Estados Unidos
SOCI/ANTH/	
INTL 3343	Relaciones fronterizas: México-Estados Unidos (bilingüe)

MIDDLE EAST STUDIES (Professors Ruqayya Y. Khan*, David Lesch, and Sussan Siavoshi)

For the major concentration in Middle East Studies, students must take 15-18 hours. After fulfilling the specific course requirements of the concentration (below), students may take additional courses from the concentration list or substitute courses taken while abroad or other special course offerings subject to the approval of the concentration coordinator and the International Programs director.

Majors in this concentration must take:

1) HIST 1350 (Medieval Islamic History, 570-1517) or HIST 1351 (The Modern Middle East)
2) PLSI 3334 (State, Society and Change in the Middle East) or PLSI 3344 (The Middle East and the World)
3) RELI 1340 (Islam, Judaism, and Christianity) or RELI 3343 (The Islamic Tradition)

For the minor concentration in Middle East Studies, students must take 12-15 hours. After fulfilling the specific course requirements of the concentration (below), students may take additional courses from the concentration list or substitute courses taken while abroad or other special course offerings subject to the approval of the Concentration coordinator and the International Programs director.

Minors in this concentration must take:
1) HIST 1350 (Medieval Islamic History, 570-1517) or HIST 1351 (The Modern Middle East)
2) RELI 1340 (Islam, Judaism, and Christianity) or RELI 3343 (The Islamic Tradition)

Trinity courses for the Middle East Studies concentration (major or minor) include:

History

HIST 1350	Medieval Islamic History, 570-1517
HIST 1351	The Modern Middle East
HIST 3350	The Arab Cultural Tradition
HIST 3354	The Persian-Arabian Gulf Region Since 1500

Political Science

PLSI 3334	State, Society and Change in the Middle East
PLSI 3344	The Middle East and the World

Religion

RELI 1340	Islam, Judaism, and Christianity
RELI 3341	The Jewish Tradition
RELI 3343	The Islamic Tradition
RELI 3346	Islamic Literatures

Sociology and Anthropology

ANTH 2312	The Anthropology of Ancient Israel (RELI 1351)

INTERNATIONAL AFFAIRS (Professors Richard V. Butler, Peter O'Brien, and Mary Ann Tétreault*)

A student with a concentration in International Affairs must take 15-18 hours from the lists below. In place of certain courses on the specialization lists below, students may substitute other courses taken while abroad or special course offerings for comparable courses in the areas on the concentration list, subject to the approval of the concentration coordinator and the International Programs director.

Introductory List (9 semester hours)

1) ECON 1311 (Principles of Microeconomics)
2) ECON 1312 (Principles of Macroeconomics) or ECON 3330 (Economics and the Environment)
3) PLSI 1341 (The Individual in World Politics) or PLSI 3346 (Geography and World Politics)

Specialization List (9 semester hours)

One course in Economics

ECON 3318	The Global Economy
ECON 3340	Economic Growth and Development
ECON 3347	International Trade
ECON 3348	International Monetary Systems
ECON 3361	International Finance (FNCE 3361)

One course in Political Science

PLSI 3341	Nationalism and Ethnicity in World Politics
PLSI 3342	International Law
PLSI 3443	Violent Conflict in International Politics

One course from the following

ANTH 2357	Humans and the Environment
ANTH 3332/ SPCH 3372	Intercultural Communication
ANTH 3358	The Anthropology of International Relations
COMM 3322/ SPCH 3374	International Communication
HIST 3339	The World War II Era
HIST 3382	The City in History
RELI 1340	Islam, Judaism, and Christianity

INTERNATIONAL ENVIRONMENTAL STUDIES (Professors Richard Reed and David Ribble*)

Students must take 15-18 hours from the following list, or from among courses taken while abroad, or from among special course offerings subject to the approval of the concentration coordinator and the International Programs director. The student must take at least one course in each of the following topical areas: economics, natural resource science and management, and humans and their environment.

Economics Area

Economics

ECON/URBS 3330 Economics and the Environment

Natural Resource Science and Management Area

Biology

BIOL 1311	Integrative Biology I
BIOL 3434	Ecology
BIOL 4351	Conservation Biology

Geosciences

GEOS 3300	Oceanography
GEOS 3308	GIS and Remote Sensing
GEOS 3411	Hydrology

Humans and their Environment Area

Comparative Literature

CMLT 2301 World Literature and the Environment

General Education

GNED 1306 Energy and Society

Geosciences

GEOS 1304 Environmental Geology: Humans and Their Physical Environment

Physics and Astronomy

PHYS 1303 The Earth's Changing Environment

Sociology and Anthropology

ANTH 1301 Introduction to Anthropology
ANTH 2357 Humans and the Environment
ANTH 3358 The Anthropology of International Relations
ANTH 3364 Economic Anthropology
ANTH 3367 South American Indigenous Peoples: Conquest and Development
ANTH 4362/
SOCI 4362 Globalization and International Development

Urban Studies

URBS 3347 Urban Systems

LINGUISTICS

FACULTY ADVISORY COMMITTEE:

JANE B. CHILDERS, Ph.D., Associate Professor, Psychology; Chair
ROCIO DELGADO, Ph.D., Assistant Professor, Education
ANDREW C. HANSEN, Ph.D., Associate Professor, Speech and Drama
L. BROOKS HILL, Ph.D., Professor, Speech and Drama
MARK C. LEWIS, Ph.D., Associate Professor, Computer Science
MICHAEL T. WARD, Ph.D., Associate Professor, Modern Languages and Literatures

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."

Students interested in a Linguistics minor should submit an application to the chair of the Committee, who will assign a faculty advisor to the student.

The requirements for a Linguistics minor are as follows:

I. Language: 2 years or the equivalent, at the college level, of a language other than English.

II. Eighteen (18) semester 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.

LING 1300 Introduction to Linguistics
A study of the scientific analysis of language – its phonology, morphology, syntax, and semantics – as well as introduction to applications of linguistics: psycholinguistics, sociolinguistics, computational linguistics, and attempts to convert language to various writing systems.

LING 2310 Introduction to the Study of Language
An introduction to language and communication systems across species. The introductory part of the course covers the major studies about animal communication systems. The main part of the course introduces the study of various human languages in both historical and descriptive terms. The structures of languages such as English, Spanish, Chinese, and Japanese are analyzed. The last part of the course introduces human language systems such as nonverbal systems, sign languages and/or computer languages. (Also listed as ENGL 2310 and SPCH 2310).

LING 3-90 Directed Studies – Junior Level
Independent study. Discretion of instructor.
Prerequisite: Consent of instructor.

LING 4-90 Directed Studies – Senior Level
Independent study. Discretion of instructor.
Prerequisite: Consent of instructor.

PRIMARY CURRICULUM

A. Core
LING 1300 Introduction to Linguistics
LING 2310 Introduction to the Study of Language (also listed as ENGL 2310 and SPCH 2310)
ENGL 2310 Introduction to the Study of Language (also listed as LING 2310 and SPCH 2310)
SPCH 2310 Introduction to the Study of Language (also listed as ENGL 2310 and LING 2310)

B. Phonology and Phonetics
SPAN 3303 Spanish Phonetics and Phonology

C. Acquisition
ENGL 3349 Language Acquisition and Development
PSYC 2330 Fundamentals of Cognition

D. Syntax
ENGL 3345 Structure of English
FREN 3301 Advanced Grammar
GERM 3301 Advanced German I
LATN 3301 Latin Prose Composition
MATH 3326 Introduction to Abstract Mathematics
RUSS 3301 Advanced Russian I
RUSS 3302 Advanced Russian II
SPAN 3301 Advanced Grammar

E. Semantics
PHIL 3333 Philosophy of Language

SUPPORTING CURRICULUM

Classical Studies
CLAS 3371 Introduction to Romance Linguistics (also listed as FREN 3371, ITAL 3371, LING 3371, and SPAN 3371)
GREK 3302 Attic Prose
GREK 3304 Greek Historians
LATN 3303 Latin Prose to 43 B.C.
LATN 3305 Latin Prose from 43 B.C.

Communication
COMM 3322 International Communication (also listed as SPCH 3374)

Computer Science
CSCI 3320 Principles of Theoretical Computer Science
CSCI 3368 Principles of Programming Language
CSCI 3-94 Seminar: Provability

English
ENGL 3335 Rhetorical Analysis (also listed as SPCH 3352)
ENGL 3346 History of the English Language
ENGL 3347 Sociolinguistics (also listed as SOCI 3330 and ANTH 3330)
ENGL 3350 Language Structures
ENGL 3355 Introduction to Old and Middle English Philology

French
FREN 3371 Introduction to Romance Linguistics (also listed as CLAS 3371, ITAL 3371, LING 3371, and SPAN 3371)

Italian
ITAL 3371 Introduction to Romance Linguistics (also listed as CLAS 3371, FREN 3371, and SPAN 3371)

Linguistics
LING 3-90 Directed Studies – Junior Level
LING 4-90 Directed Studies – Senior Level

Philosophy
PHIL 2340 Symbolic Logic I
PHIL 3331 Philosophy of Mind
PHIL 3333 Philosophy of Language
PHIL 3340 Symbolic Logic II

Psychology
PSYC 3331 Memory and Cognition
PSYC 3321 Cognitive Development

Sociology and Anthropology
ANTH 3330 Sociolinguistics (also listed as ENGL 3347 and SOCI 3330)
ANTH 3331 Language, Culture and Society (also listed as SOCI 3331)
SOCI 3330 Sociolinguistics (also listed as ANTH 3330 and ENGL 3347)
SOCI 3331 Language, Culture and Society (also listed as ANTH 3331)
ANTH 3332 Intercultural Communication (also listed as SPCH 3372)

SPANISH
SPAN 3371 Introduction to Romance Linguistics (also listed as CLAS 3371, FREN 3371, ITAL 3371, and LING 3371)

Speech
SPCH 3352 Rhetorical Analysis (also listed as ENGL 3335)
SPCH 3372 Intercultural Communication (also listed as ANTH 3332)
SPCH 3374 International Communication (also listed as COMM 3322)

Departmental topics courses, readings courses, and seminars on linguistic topics are acceptable as approved by the Linguistics Committee chair.

MATHEMATICS

EDUARDO CABRAL BALREIRA, Ph.D., Assistant Professor
RYAN DAILEDA, Ph.D., Assistant Professor
SABER ELAYDI, Ph.D., Professor; Interim Chair
JULIO ROBERTO HASFURA-BUENAGA, Ph.D., Associate Professor
ALLEN HOLDER, Ph.D., Associate Professor
NATASA MACURA, Ph.D., Associate Professor
BRIAN MICELI, Ph.D., Assistant Professor
PETER OLOFSSON, Ph.D., Associate Professor
DIANE G. SAPHIRE, Ph.D., Associate Professor; Assistant Vice President for Information Resources and Administrative Affairs; Director, Institutional Research

THE MAJOR

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

I. The common curriculum

II. Departmental requirements:

a. Mathematics core: MATH 1307 or 1311, 1308 or 1312, 2321, 3323, 3326, 3360, 3362.
b. Seminar/Writing: MATH 2094 (twice), 3194.
c. Mathematics electives: Eighteen (18) additional MATH semester hours numbered above 3320. At least three (3) of them must be numbered 4xxx.
d. Programming proficiency: CSCI 1320.
e. Completion of the Senior Experience: MATH 4394, or MATH 4398 and 4399.

III. Electives sufficient to total 124 semester hours.

The appropriate choice of courses beyond those in the core depends on the student's interests and career plans and should be determined in consultation with the academic advisor. Further course suggestions and other information appear on the department's web site.

ACCEPTANCE INTO PROGRAM

FULL ACCEPTANCE is granted if the following requirements are met at the time of application:

1. MATH 1307 or 1311, 1308 or 1312, 2321, 3323 with grades of C or better.
2. Grade point average of at least 2.0 in all mathematics courses.
3. Completion of at least one mathematics course required for the major while enrolled at Trinity University.
4. CSCI 1320 with a grade of C or better.

PROVISIONAL ACCEPTANCE may be granted if the Department of Mathematics is convinced that the applicant has promise of graduating with a degree in mathematics. In cases of provisional acceptance, courses and performance standards will be specified so that the applicant may be granted full acceptance.

THE MINOR

A mathematics minor must complete MATH 1307 or 1311, 1308 or 1312, 2321, and nine (9) hours of upper division mathematics.

THE HONORS PROGRAM

Objectives

The Mathematics Department offers an Honors Program to provide students the opportunity to develop their capacity for mathematical skill and knowledge by completing a senior honors thesis. The thesis may be written in collaboration with any other university department that offers instruction. Specifics for interdisciplinary thesis must be worked out on an individual basis with the department.

Application and Procedures

Application for admission to the honors program is made through the department in the fall of the junior year. The University requires a 3.3 overall grade point average and two faculty letters of recommendation for admission to the program. In addition, the mathematics department requires at least 15 hours of work in mathematics courses 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 advisor. The application is then submitted to the thesis advisor who determines if the documentation merits further consideration. Given the judgment by the thesis advisor that the student is a good candidate for the thesis, the student, in collaboration with the advisor, 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 advisor, recommends a thesis committee to the Office of Academic Affairs. The committee will consist of the thesis advisor, 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 advisor.

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 induction, counting techniques, and more. The course may be repeated up to four (4) times for credit. Fall.
Prerequisite: MATH 1307 or 1311, concurrent, or consent of instructor.

MATH 1301 Precalculus
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 I.

MATH 1307 Calculus A
A study of functions, limits and continuity, and differential and integral calculus. Motivation and support for these topics will draw from applications in the life sciences. In particular, topics in discrete dynamics, differential equations, polynomial approximation, regression, and matrix algebra will be used to support biological examples. MATH 1307 and 1311 cannot both be taken for credit.
Prerequisite: Successful completion of MATH 1301 or passing of the Mathematics Placement Exam.

MATH 1308 Calculus B
Application of calculus; topics include techniques of integration, ordinary differential equations, convergence of geometric series, probability, numerical analysis, and simulation. This course is designed to assist students in the application of calculus to other disciplines.
Prerequisite: MATH 1307 or 1311 or equivalent.

MATH 1310 Mathematics for Decision-Making
This course will examine a number of concepts, tools, and methods useful in the search for optimal solutions to a variety of problems, in the resolution of conflicts, and in the discernment of patterns or trends in raw data. Among the topics to be considered are routing problems, shortest networks and scheduling; the mathematics of voting and methods of apportionment; linear, exponential and logistic growth, chaos and symmetry; basic statistics: collection and description of data, and margin of error. Applications to fields like economics and political science will be emphasized, but the level throughout will be elementary.

MATH 1311 Calculus I
A study of functions including transcendental and trigonometric: Limits and continuity; differential and integral calculus; and applications. MATH 1307 and 1311 cannot both be taken for credit.
Prerequisite: MATH 1301 or equivalent.

MATH 1312 Calculus II
A study of methods of integration, series, and an introduction to differential equations and linear algebra.
Prerequisite: MATH 1307 or 1311 or 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 1307 or 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 2094 Majors' Seminar
Attendance at the departmental seminar. Grade based on attendance. This course must be taken twice, and it cannot be taken concurrently with MATH 3194 or 4394.

MATH 2303 Math for Elementary School Teachers
A course based on the National Council of Teachers of Mathematics standards designed to develop understanding of the algebraic principles essential for elementary school teachers. Topics include Problem Solving Strategies, Numbers and Numeration, Tests for Divisibility, Estimation and Electronic Computation, Introductory Probability and Statistics.
Prerequisites: Satisfying the Mathematics Skill Requirement and EDUC 2201 or 2202 or equivalent.

MATH 2321 Calculus III
The study of partial differentiation, multiple integrals, and vector calculus.
Prerequisite: MATH 1308 or 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: MATH 1307 or 1311 or equivalent and knowledge of computer programming.

MATH 3194 Junior Writing 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 attempt to solve a mathematical problem from a college mathematics journal and will present their findings in both written and oral form. Attendance at the Majors' Seminar (MATH 2094) is required.

MATH 3310 Mathematical Models in Life Sciences
The course is designed to introduce basic tools to study 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, cooperative, competitive, and predator-prey models, harvesting models, and epidemiological models. The integrated laboratory experience consists of several experiments on model organisms such as bacteria, flour beetles (Tribolium), protists, and duckweed. In addition, human epidemiological data will also be utilized. Offered every Fall semester.
Prerequisite: MATH 1307 or 1311.

MATH 3311 Probabilistic Models in Life Sciences
The central topic of this course is probabilistic modeling with emphasis on biological sequence comparison and applications in functional analysis of DNA and protein sequences and their evolution. Biological experiments will be introduced to motivate new concepts and enhance understanding of the material covered. Emphasis will be on comprehending the biological and mathematical principles underlying the models introduced and applying this understanding to evaluate and interpret the biological significance of experimental results.

Basic concepts of probability will be presented, with a special attention to conditional probability. Probabilistic models and algorithms used in global and local pairwise sequence alignment will be developed. The expectation, variance, and standard deviation of discrete and continuous random variables, along with a number of common distribution functions, will be explained. Markov models and the application of discrete Markov chains in biology and biological sequence analysis will also be covered. These concepts will be used to extend the ideas from the pairwise sequence alignments to the problems of multiple sequence alignment, evolutionary distances, and phylogenetic tree construction. Offered every Spring semester.
Prerequisite: MATH 1307 or 1311.

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. MATH 1320 and 3320 cannot both be taken for credit.
Prerequisite: MATH 2321.

MATH 3323 Linear Algebra
A study of the theory and computations of linear algebra. Topics include matrix and vector operations, vector spaces, orthogonality, eigenvalues and eigenvectors, and linear transformations. Diagnonalization and the Jordan canonical form. Fall.

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 mathematical proof, framed in introductions to the real line, point set topology, and modern algebra. This course is offered every semester.
Prerequisite: MATH 1308 or 1312 or equivalent, or consent of instructor.

MATH 3334 Probability
This course covers the basic concepts of probability, including counting methods, events, conditional probability, discrete and continuous random variables and their distributions, multivariate distributions, commonly used discrete and continuous distributions, functions of random variables, expectation, variance, covariance, and correlation. Fall.
Prerequisite: MATH 2321.

MATH 3335 Mathematical Statistics
This course covers the basic concepts of statistics, including samples, statistics, estimation, sampling distributions of estimators, confidence intervals, tests of hypotheses, significance, power, and simple linear regression. Additional topics may include Bayesian statistics, analysis of variance, and nonparametric methods. Spring.
Prerequisite: MATH 3334.

MATH 3336 Differential Equations 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 3336 and 3366 may not both be taken for credit.
Prerequisite: MATH 1308 or 1312.

MATH 3338 Mathematical Modeling
Formulation, analysis, and interpolation 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. Fall.
Prerequisites: MATH 2321, 3336 or 3366, and knowledge of computer programming or consent of instructor.

MATH 3341 Number Theory I
A study of the arithmetic properties of the ring of integers. Topics may include factorization, modular arithmetic, solution of polynomial congruences, the law of quadratic reciprocity, Diophantine equations, and applications to cryptography, Fall, alternate years.
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 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 for ordinary differential equations. (Also listed as CSCI 3351.) Spring.
Prerequisites: MATH 3336 and knowledge of computer programming.

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, the hyperbolic geometry of Lobachevsky, and the 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 expansions, Sturm-Liouvulle theory, and the Fourier and Laplace transform methods. Additional topics may include Green's functions, Poisson's integral formula for the disk, and variational calculus. Spring.
Prerequisites: MATH 2321 and 3336 or 3366.

MATH 3359 Difference Equations
Dynamics of first order difference equations, difference equations of higher order, stability analysis, and methods of the Z-transform. Offered infrequently.
Prerequisite: MATH 3323 or 3336.

MATH 3360 Real Analysis I
An introduction to the real number system, elementary topology of Euclidean spaces, and the 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. Spring.
Prerequisites: MATH 3326.

MATH 3366 Differential Equations
Introduction to the basic quantitative and qualitative concepts of differential equations. Topics include first order differential equations, second order linear differential equations and applications, Laplace transforms, and systems of differential equations. MATH 3336 and MATH 3366 may not both be taken for credit. Spring, infrequently.
Prerequisite: MATH 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 *Courses of Study Bulletin*. Announcements of this course will be made by special prospectus. The course may be repeated for credit on different topics.

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 Poisson processes, random walks, Markov chains in discrete and continuous time, branching processes, queueing systems, and Brownian motion. Fall, 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.
Prerequisites: 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. Spring, alternate years.
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.
Prerequisites: MATH 3323 and 3362.

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.
Prerequisite: 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 3366, which may include chaos theory, bifurcation, and discrete and continuous systems. Offered infrequently.
Prerequisites: MATH 3360 and 3366, 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. The course may be repeated for credit on different topics.

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. This course fulfills the Senior Experience requirement of the University's Common Curriculum.
Prerequisite: Senior standing.

MATH 4398, 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. These two courses fulfill the Senior Experience requirement of the University's Common Curriculum.
Prerequisite: Senior standing.

MEDIEVAL AND RENAISSANCE STUDIES

FACULTY ADVISORY COMMITTEE:

LAURA AGOSTON, Ph.D., Associate Professor, Art History
RUQAYYA Y. KHAN, Associate Professor, Religion
KIMBERLYN W. MONTFORD, Associate Professor, Music
WILLIS A. SALOMON, Ph.D., Associate Professor, English; Chair
MICHAEL T. WARD, Ph.D., Associate Professor, Modern Languages and Literatures

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 submit an application to the Chair of the Committee, who will assign a faculty advisor to the student.

The requirements for a minor in Medieval and Renaissance Studies are as follows:

I. A total of 18 semester hours, including at least 12 hours from the Primary Curriculum and the remainder from the Supporting Curriculum (upon recommendation by the Chair of the Committee, a student may be permitted to substitute one or more other appropriate courses). MDRS 3301, or its cross-listed equivalent (ENGL 3305, ARTH 3338, MUSC 3351), is required of all students completing the minor.

II. At least 6 hours from the Primary Curriculum must be in Medieval courses and at least 6 hours from the Primary Curriculum must be in Renaissance courses.

III. At least 9 semester hours of the total to be in upper division courses.

IV. No more than 6 semester hours from the Primary Curriculum and Supporting Curriculum to overlap with the student's primary major.

V. No more than 12 semester hours from the Primary Curriculum and Supporting Curriculum to be taken in any one department.

Students are strongly encouraged to prepare themselves in Latin, as well as in Greek, and in at least one, or preferably two, modern European languages (normally French, German, Italian, and/or Spanish).

MDRS 3101 Interdisciplinary Studies in the Middle Ages and Renaissance
Intensive study of one major book and related materials in the area of Medieval and/or Renaissance studies. If possible, the book's author will be brought to the campus to meet with the class. Class meets once each week for eight weeks. Can be repeated up to 3 times for MDRS credit. Primary Curriculum.

MDRS 3301 Culture and Creativity in the Middle Ages and Renaissance
A course focusing on the interrelation of art, music, literature, and history at significant moments in the Middle Ages and Renaissance. The goal is to make it possible for students to draw new connections between the areas of culture dealt with in the course. The syllabus may include such important cultural figures and works as Charlemagne, Gregorian chant, *The Song of Roland*, Thomas Aquinas, motets, Michaelangelo, and Shakespeare. The course will combine lectures with detailed work in discussion sections. (Also listed as ARTH 3338, ENGL 3305, and MUSC 3351.)

I. Primary Curriculum

M = counts toward the Medieval requirement
R = counts toward the Renaissance requirement
MR = counts toward either the Medieval or the Renaissance requirement

ARTH 3332	Medieval Art (M)
ARTH 3340	The Art of France, Germany, and the Netherlands, 1300-1550 (MR)
ARTH 3341	Early Renaissance Art in Italy (R)
ARTH 3342	High Renaissance Art and Mannerist Art in Italy (R)
ARTH 3344	Netherlandish Art in the Age of Bruegel, Rubens and Rembrandt (MR)
ARTH 3391	Topics in Art History: Michelangelo (R)
ARTH 3392	Women's Studies in Art History: Gender and Sexuality in Early Modern Italy (MR)
ENGL 2306	Medieval Imagination (M)
ENGL 3346	History of the English Language (MR)
ENGL 3355	Introduction to Old and Middle English Philology (M)
ENGL 3356	Readings in Old English Literature (M)
ENGL 3357	English Literature of the Late 14th Century (M)
ENGL 3358	Medieval and Early Renaissance Drama (MR)
ENGL 3359	Medieval Literature: The World of King Arthur (M)
ENGL 3359	Medieval Literature: Sin and Social Revolt in Middle English Literature (M)
ENGL 3359	Medieval Literature: Sir Gawain and the Green Knight and Medieval Romance (M)
ENGL 3359	Medieval Literature: Sins and Sinners in Western Culture (M)
ENGL 3360	Shakespeare: The Comedies and the Histories (R)
ENGL 3361	Shakespeare: The Tragedies and Late Romances (R)

ENGL 3362 Early Modern British Literature, 1485-1603 (R)
ENGL 3363 Early Modern British Literature, 1603-1660 (R)
ENGL 4301 Geoffrey Chaucer (M)
ENGL 4302 Elizabethan and Jacobean Playwrights (R)
ENGL 4320 Studies in Early Modern British Literature: The Performance of Gender, Wyatt to Shakespeare (R)
ENGL 4320 Studies in Early Modern British Literature: Shakespeare's Sonnets and the Subject of Sexuality (R)
ENGL 4320 Studies in Early Modern British Literature: Shakespeare's Playtexts (R)
FREN 4301 Medieval French Literature (M)
FREN 4302 Topics in French Literature of the Sixteenth Century (R)
HIST 1332 Medieval Europe (M)
HIST 1350 Medieval Islamic History, 570-1517 (M)
HIST 3330 The European Renaissance (R)
HIST 3331 Courts and Court Society in Early Modern Europe (R)
HIST 3350 The Arab Cultural Tradition (MR)
SPAN 4331 Medieval Spanish Literature (M)
SPAN 4332 Spanish Golden Age Literature (R)
SPAN 4333 Don Quixote (R)
SPAN 4391 Special Topics: History of the Spanish Language (M/R)

II. Supporting Curriculum

ARTH 1307 Art History I: Prehistoric through Medieval Art
ARTH 1308 Art History II: Renaissance to Modern Art
ARTH 3330 Art and Architecture in the Late Classical World
ARTH 3345 Spanish Colonial Art and Architecture in Mexico
CLAS 3304 The Ancient Romance and Novel
DRAM 3333 History of Theatre and Drama
ENGL 2301 British Literature: Epic to Romantic
ENGL 4303 Milton
ENGL 4326 Seminars on Individual Authors: John Donne
ENGL 4326 Seminars on Individual Authors: Edmund Spenser
FREN 3305 Introduction to French Literature I
FREN 4303 Topics in French Literature of the Seventeenth Century
GERM 3303 German Civilization and Culture
GERM 3305 Introduction to German Literature I
GREK 2303 Readings in the New Testament
HIST 1334 Early Modern Europe (1500-1815)
HIST 3314 The Mediterranean World in the Hellenistic Age
HIST 3318 The Roman Empire
HIST 3332 Culture and Society in Early Modern Europe
MUSC 3341 Music History I
PLSI 3361 Classical Political Thought
RELI 1340 Islam, Judaism, and Christianity
RELI 3341 The Jewish Tradition
RELI 3342 The Christian Tradition
RELI 3343 The Islamic Tradition
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

MODERN LANGUAGES AND LITERATURES

CARLOS X. ARDAVÍN, Ph.D., Associate Professor, Spanish
ALAN M. ASTRO, Ph.D., Professor, French
ROSANA BLANCO-CANO, Ph.D., Assistant Professor, Spanish
SARAH P. BURKE, Ph.D., Professor, Russian
NINA C. EKSTEIN, Ph.D., Professor, French
STEPHEN L. FIELD, Ph.D., J. K. and Ingrid Lee Endowed Professor of Chinese Language and Literature
BRUCE T. HOLL, Ph.D., Associate Professor, Russian
NANETTE LE COAT, Ph.D., Associate Professor, French
ARTURO MADRID, Ph.D., Norine R. and T. Frank Murchison Distinguished Professor of the Humanities, Spanish
PABLO A. MARTINEZ, Ph.D., Associate Professor, Spanish
DEBRA OCHOA, Ph.D., Assistant Professor, Spanish
BLADIMIR RUIZ, Ph.D., Associate Professor, Spanish
THOMAS SEBASTIAN, Ph.D., Professor, German; Chair
MATTHEW D. STROUD, Ph.D., Professor, Spanish
HEATHER I. SULLIVAN, Ph.D., Associate Professor, German
RITA E. URQUIJO-RUIZ, Ph.D., Assistant Professor, Spanish
MICHAEL T. WARD, Ph.D., Associate Professor, Italian and Spanish
WEN XING, Ph.D., Associate Professor, Chinese
JIE ZHANG, Ph.D., Assistant Professor, Chinese

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 and Italian are offered on the elementary and intermediate levels. Courses in Greek and Latin are the responsibility of the Department of Classical Studies.

THE MAJOR

In order to be granted full acceptance for admission to a major in Chinese, French, German, Russian, or Spanish, a student must have completed the 3301 course in that language with a grade of C or better.

CHINESE

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

I. The common curriculum

II. Departmental requirements:

A. Completion of 21 semester hours, of which no more than 3 may be lower division (2302). Upper division will include CHIN 4351.
B. Completion of one of the following additional requirements:
1. Nine additional semester hours of upper division courses in Chinese. Students have the option of substituting up to 9 semester hours from the following: CHIN 2311, HIST 3371, ML&L 3301, 3302, PHIL 3328, and RELI 3333.
2. The lower division courses, or the equivalent, and at least 3 semester hours of upper division courses in a second foreign language.
C. The Senior Experience requirement can be satisfied by completing GNED 4300 Senior Interdisciplinary Seminar, GNED 4301 Senior Synthesis, or CHIN 4001 Senior Experience. The first two options will be in addition to the 30 (or 21) hours required for the Chinese major, while the third will not.

FRENCH

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

I. The common curriculum

II. Departmental requirements:

A. Completion of 21 semester hours of upper division courses, including:
1. 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 exceptions:
a. A student receives a 5 on the College Board Advanced Placement exam or a 6 or 7 on the International Baccalaureate exam;
b. 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.”
2. FREN 3305
3. FREN 3306

B. Completion of one of the following additional requirements:

1. Nine additional semester hours of upper division courses in French; OR
2. The lower division courses, or the equivalent, and at least 3 semester hours of upper division courses in a second foreign language.

C. The Senior Experience requirement can be satisfied by completing one of the following options. The first two options will be in addition to the 30 (or 21) hours required for the French major, while the final three will not.

1. GNED 4300 Senior Interdisciplinary Seminar;
2. GNED 4301 Senior Synthesis;
3. FREN 4001;
4. FREN 4398, 4399 Honors Thesis;
5. FREN 4310 Senior Seminar (when offered).

GERMAN

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

I. The common curriculum

II. Departmental requirements:

A. Completion of 21 semester hours of upper division courses including GERM 3301 and either 3305 or 3306.
B. Completion of one of the following additional requirements:
1. Nine additional semester hours of upper division courses in German. Students have the option of substituting ML&L 3320 for three of the 9 hours; OR
2. The lower division courses, or the equivalent, and at least 3 semester hours of upper division courses in a second foreign language.
C. The Senior Experience requirement can be satisfied by completing one of the following options. The first two options will be in addition to the 30 (or 21) hours required for the German major, while the third will not.
1. GNED 4300 Senior Interdisciplinary Seminar;
2. GNED 4301 Senior Synthesis; OR
3. GERM 4001.

RUSSIAN

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

I. The common curriculum

II. Departmental requirements:

A. Completion of 21 semester hours, of which no more than 3 may be lower division (2302). Upper division hours will include:
1. RUSS 3301
2. RUSS 3305
The RUSS 3305 requirement will be waived for students who have taken ML&L 3340.
B. Completion of one of the following additional requirements:
1. Nine additional semester hours of upper division courses in Russian.
Students have the option of substituting up to 9 semester hours from the following courses: ARTH 3362; ECON 3327; HIST 3311; PLSI 3335; OR
2. The lower division courses, or the equivalent, and at least 3 semester hours of upper division courses in a second foreign language.
C. The Senior Experience requirement can be satisfied by completing GNED 4300 Senior Interdisciplinary Seminar, GNED 4301 Senior Synthesis, or RUSS 4001 Senior Experience. The first two options will be in addition to the 30 (or 21) hours required for the Russian major, while the third will not.

SPANISH

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

I. The common curriculum

II. Departmental requirements:

A. Completion of 21 hours, of which no more than 3 may be lower division (2302) and no more than 3 may be taken as Internship. Upper division hours will include:
1. SPAN 3301
2. SPAN 3330 or 3331
3. SPAN 3332
B. Completion of one of the following additional requirements:
1. Nine additional semester hours of upper division courses in Spanish (students have the option of substituting up to three hours of Spanish across the Curriculum courses); OR
2. The lower division courses, or the equivalent, and at least three semester hours of upper division courses in a second foreign language.
C. The Senior Experience requirement can be satisfied by completing GNED 4300 Senior Interdisciplinary Seminar, GNED 4301 Senior Synthesis, or SPAN 4001 Senior Experience. The first two options will be in addition to the 30 (or 21) hours required for the Spanish major, while the third will not.

THE MINOR

The requirements for a minor in Chinese, French, German, Russian, and Spanish are as follows: Completion of at least 18 semester hours, of which no more than 6 may be lower division. A minimum of 12 hours toward the minor must be completed at Trinity.

TRANSFER CREDIT

In conjunction with the Registrar's Office, transfer credit for language courses must be evaluated and approved by the language section in addition to the chair of the department. Such evaluation may include, but need not be limited to, the syllabus for the course and the test required of students showing competency in the language.

THE HONORS PROGRAM

I. University requirements

II. Departmental requirements:

The Department of Modern Languages and Literatures offers an Honors Program in Chinese, French, German, Russian, and Spanish. The requirements for Honors in Modern Languages and Literatures are the same as the university requirements. A full description of the program is available in the departmental office.

SELF-INSTRUCTIONAL LANGUAGE PROGRAM

The Department of Modern Languages and Literatures offers self-instructional courses in critical languages of global and economic importance. Although students will meet with a native-speaking tutor for 2 hours per week, the self-instructional nature of these courses demands that students have a demonstrated ability to learn a foreign language and be highly motivated and disciplined. Registration is by consent of the Director only. The courses for which students may enroll are the following:

SILP 1301	Beginning Self-Instructional Language I
SILP 1302	Beginning Self-Instructional Language II
SILP 2301	Intermediate Self-Instructional Language I
SILP 2302	Intermediate Self-Instructional Language II

Upon registration, the name of the course to appear on the transcript will be changed to reflect the language studied, for example:
SILP 1301 Beginning Japanese I
None of these courses may count toward fulfillment of the university language requirement.

COURSES

MODERN LANGUAGES AND LITERATURES:

Taught in English and works read are in English.

ML&L 1303 Japanese Perspectives
This course introduces the student to Japanese culture in its religious, political, aesthetic, and social dimensions especially as each is affected by Western influences. (Also listed at ANTH 1303 and GNED 1303.)

ML&L 2301 International Cinema
This course focuses on the cultural and critical analysis of international films as an expression of particular artistic genres and/or styles within specific historical, ideological, and cultural contexts. Films selected have achieved wide, critical acclaim; others reveal unique and important visions of human experience; while still others are selected for their political, ideological, or sociological significance. Students should develop an awareness that the medium of film has a history and that its history is not confined to national boundaries. (Also listed as ARTH 2301, COMM 2301, ENGL 2300, and FILM 2301.)

ML&L 3301 Chinese Literature in Translation I
A study of selected works of classical Chinese literature.

ML&L 3302 Chinese Literature in Translation II
A study of selected works of Modern Chinese literature.
ML&L 3302 and CHIN 4321 cannot both be taken for credit unless the topics differ.

ML&L 3303 Chinese Cinema: A Historical and Cultural Perspective
A study of Chinese culture and socio-political changes in the modern history of China, Taiwan and Hong Kong through viewing, discussing, and analyzing contemporary films. ML&L 3303 and CHIN 3312 cannot both be taken for credit.

ML&L 3304 Chinese Calligraphy
A survey of the major script styles in the Chinese writing system. While tracing the history of Chinese calligraphy, the class will also explore theoretical issues including representation, expression, formalism, and contemporary approaches relating to the practice of calligraphy. In-class work will give students hands-on experience using traditional Chinese writing tools. (Also listed as CHIN 3304.)

ML&L 3310 French Literature in Translation
A study of major works of French literature in the context of Western literary, political, and cultural history, and literary criticism.

ML&L 3311 French Cinema
This course will examine a variety of French films from the 1930s to the present, focusing on developing an understanding of the aesthetic qualities of the individual films, while also examining the history of French cinema, how cinema conveys meaning, and how the specificity of French culture is depicted in the films.
Prerequisite: Sophomore standing or above.

ML&L 3320 German Literature in Translation
A study of major works of German literature in the context of Western literary, socio-political and cultural history, and literary criticism.

ML&L 3321 German Cinema
This course will examine German films from the silent period in the early 1920s 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 the films.

ML&L 3330 Japanese Literature in Translation
Japanese culture through the major works in Japanese literature and its major religions, Shinto and Buddhism. The interrelationship of the art/architecture is also highlighted. Readings 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 through 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 3-91 Selected Topics
Special study in fields not covered by other courses. May be repeated on different topics.

Plan of Lower Division Language Courses

1000-level courses are beginning courses. Emphasis is on the spoken language, with extensive use of dialogues and drills designed to illustrate the basic structural features of the language and to develop oral proficiency. 1301, 1401, and 1501 courses are normally offered only in the fall semester, 1302, 1402, and 1502 courses only in the spring. 1403 and 1600 courses may be offered in both semesters.

Courses numbered 1402 are a continuation of 1401 and will generally complete the study of the basic grammatical features of the language.

Courses numbered 2301 and 2302 consist of intermediate level language study, focusing on speaking, reading, grammar, writing, and comprehension. Except for SPAN 2301, courses numbered 2301 are normally offered only in the fall semester.

Language courses 1401, 1402, 1403, 1600, or 2301 may be taken pass/fail unless the student is using them to satisfy the skill requirement of the Common Curriculum.

ARABIC

ARAB 1401 Beginning Modern Standard Arabic I
Beginning Modern Standard Arabic I. 4 class hours a week.

ARAB 1402 Beginning Modern Standard Arabic II
Beginning Modern Standard Arabic II. 4 class hours a week.
Prerequisite: ARAB 1401 or the equivalent.

ARAB 2301 Intermediate Modern Standard Arabic I
Beginning Modern Standard Arabic I. 3 class hours a week.
Prerequisite: ARAB 1402 or the equivalent.

ARAB 2302 Intermediate Modern Standard Arabic II
Beginning Modern Standard Arabic I. 3 class hours a week.
Prerequisite: ARAB 2301 or the equivalent.

CHINESE

LOWER DIVISION

CHIN 1501 First-Year Chinese I
Modern standard Chinese (Mandarin). 5 class hours a week. (Not open to native speakers of Mandarin.)

CHIN 1502 First-Year Chinese II
Modern standard Chinese (Mandarin). 5 class hours a week. (Not open to native speakers of Mandarin.)
Prerequisite: CHIN 1501 or the equivalent.

CHIN 2301 Second-Year Chinese I
Modern standard Chinese (Mandarin).
Prerequisite: CHIN 1502 or the equivalent.

CHIN 2302 Second-Year Chinese II
Modern standard Chinese (Mandarin).
Prerequisite: CHIN 2301 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.

UPPER DIVISION

CHIN 3301 Third-Year Chinese I
Continued study of Chinese grammar and colloquial speech patterns.
Prerequisite: CHIN 2302 or the equivalent, or consent of instructor.

CHIN 3302 Third-Year Chinese II
Continuation of CHIN 3301.
Prerequisite: CHIN 3301 or the equivalent, or consent of instructor.

CHIN 3304 Chinese Calligraphy
A survey of the major script styles in the Chinese writing system. While tracing the history of Chinese calligraphy, the class will also explore theoretical issues including representation, expression, formalism, and contemporary approaches relating to the practice of calligraphy. In-class work will give students hands-on experience using traditional Chinese writing tools. The course will be taught in English. (Also listed as ML&L 3304.)
Prerequisite: CHIN 2302 or consent of instructor.

CHIN 3312 Chinese Cinema: A Historical and Cultural Perspective
A study of Chinese culture and socio-political changes in the modern history of China, Taiwan, and Hong Kong through viewing, discussing, and analyzing contemporary films. CHIN 3312 and ML&L 3303 cannot both be taken for credit.
Prerequisite: CHIN 2302 or the equivalent.

CHIN 3313 Cities of Strangers: Trans-cultural Chinese Cinema
A cinema course with a focus on genres contributing to the popular imagination about cities such as Beijing, Shanghai, Hong Kong, and Taipei. Examples will be drawn from martial arts films, gangster films, ghost stories, and "exile" films. Major theoretical concerns are cultural stereotyping, politics of representation, and the appropriation of gender discourses. Course taught in English.

CHIN 3330 The Culture of Business in China
A seminar on Sino-American cross-cultural communication in a business context. Students will read selected texts, including excerpts from Sunzi's The Art of War, and conduct daily discussions and role playing on such subjects as how to conduct interpersonal relationships and the strategies of business negotiation. (Also listed as BUSN 3330.)
Prerequisites: Junior standing and 6 hours of business administration or 6 hours of Chinese or consent of instructor.

CHIN 4001 Senior Experience
The Senior Experience requirement for the Chinese major may be satisfied by submitting during the senior year a written paper or project based on one of the following: (1) An upper division course taken during the senior year. The paper or project will be in addition to the general requirements for the course, and will be approved by and submitted to the professor of the course. (2) An approved study abroad experience in a country in which the language of the major is spoken. The paper or project must be proposed before the student goes abroad, and approved by and submitted to the major advisor. This is a no-credit, pass/fail course.
Prerequisite: Senior standing as a Chinese major.

CHIN 4301 Fourth-Year Chinese I
Continued study of Chinese grammar and colloquial speech patterns.
Prerequisite: CHIN 3302 or the equivalent.

CHIN 4302 Fourth-Year Chinese II
Continuation of CHIN 4301.
Prerequisite: CHIN 4301 or the equivalent.

CHIN 4310 Advanced Conversation and Composition
An advanced course in Chinese conversation and composition using a variety of Internet media.
Prerequisite: CHIN 3302 or the equivalent.

CHIN 4321 Topics in Modern Chinese Literature
A study of selected works of modern Chinese literature. May be taken more than once, provided topics vary.
Prerequisite: CHIN 3302 or the equivalent.
Note: CHIN 4321 and ML&L 3302 cannot both be taken for credit unless the topics differ.

CHIN 4351 Classical Chinese
A study of classical Chinese grammar with selected readings from classical Chinese literature.
Prerequisite: CHIN 2302 or the equivalent.

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 4-91 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 4-97 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 credit. Pass/Fail.
Prerequisite: Approval of internship supervisor.

FRENCH

LOWER DIVISION

FREN 1401 **Elementary French I**
4 class hours a week for one semester.

FREN 1402 **Elementary French II**
4 class hours a week for one semester.

FREN 2301 **Intermediate French I**
Prerequisite: FREN 1402 or the equivalent.

FREN 2302 **Intermediate French II**
Prerequisite: FREN 2301 or the equivalent.

UPPER DIVISION

FREN 3301 **Advanced Grammar**
Intensive review of the rules of French grammar, as well as exceptions thereto; practical application through written and oral exercises and through reading of text materials suitable to the needs of the class.
Prerequisite: FREN 2302 or the equivalent.

FREN 3303 **French Civilization**
A study of contemporary France through a variety of perspectives, including historical background, cultural, intellectual, and political traditions, and the Francophone world.
Prerequisite: FREN 2302 or the equivalent, or consent of instructor.

FREN 3305 **Introduction to French Literature I**
A study of major works of French literature through the eighteenth century in the context of Western literary, political, and cultural history, and literary criticism.
Prerequisite: FREN 2302 or consent of instructor.

FREN 3306 **Introduction to French Literature II**
A study of major works of French literature from the nineteenth century to the present in the context of Western literary, political, and cultural history, and literary criticism.
Prerequisite: FREN 2302 or consent of instructor.

FREN 3371 **Introduction to Romance Linguistics**
A study of the science of language as it applies to those tongues having their origin in spoken Latin, principally French, Italian, Portuguese, Rumanian, and Spanish. Attention will be given both to historical developments and to the current situations of such languages. (Also listed as CLAS 3371, ITAL 3371, LING 3371, and SPAN 3371.)
Prerequisite: Two years or the equivalent of Latin, Ancient Greek, or a Romance language.

FREN 3-98 **Honors Reading**
Independent study in selected areas in preparation for Honors Thesis.
Prerequisite: Admission to Honors Program.

FREN 4001 **Senior Experience**
The Senior Experience requirement may be satisfied by simultaneously enrolling in this course and an upper-division French course during the last semester of the senior year, with the additional requirement of a research paper. The paper will be in addition to the general requirements for the course, and will be approved by and submitted to the professor of the course. This is a no-credit, pass/fail course.
Prerequisite: Senior standing as a French major.

FREN 4301 **Medieval French Literature**
A study of the masterpieces of medieval French literature including such works as La Chanson de Roland, Yvain, Les Lais de Marie de France, Le Roman de la Rose, etc.
Prerequisites: FREN 3305, 3306 or the equivalent, or consent of instructor.

FREN 4302 **Topics in French Literature of the Sixteenth Century**
May be taken more than once, provided topics vary.
Prerequisites: FREN 3305, 3306 or the equivalent, or consent of instructor.

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 topics vary.
Prerequisites: FREN 3305, 3306 or the equivalent, or consent of instructor.

FREN 4307 **French Cinema**
This course will examine a variety of French films from the 1930s to the present, focusing on developing an understanding of the aesthetic qualities of the individual films, while also examining the history of French cinema, how cinema conveys meaning, and how the specificity of French culture is depicted in the films.
Prerequisite: 6 upper-division hours in French.

FREN 4310 Senior Seminar
This course will present major works of French literature and literary methodologies that are not generally covered in other French courses, because of the relative level of difficulty. Course content will vary, but examples of possible authors are: Montaigne, Sade, Mallarmé, and Proust.
Prerequisites: Senior standing as a French major; FREN 3305, 3306.

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, 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.

UPPER DIVISION

GERM 3301 Advanced German I
Emphasis on conversation as well as composition and grammar. Text material may reflect either literary, scientific, or business German suitable to the need of the class.
Prerequisite: GERM 2302 or the equivalent.

GERM 3302 Advanced German II
Emphasis on conversation as well as composition and grammar. Text material may reflect either literary, scientific, or business German suitable to the needs of the class.
Prerequisite: GERM 3301 or the equivalent.

GERM 3305 Introduction to German Literature and Culture I
A study of exemplary works of German literature, theater, and art that illustrate major cultural changes in German history during the late 18th and early 19th centuries.
Prerequisite: GERM 2302.

GERM 3306 Introduction to German Literature and Culture II
A study of exemplary works of German literature, theater, and film that illustrate major cultural changes in German history during the late 18th and early 19th centuries.
Prerequisite: GERM 2302.

GERM 3398 Honors Readings
Independent study in selected areas in preparation for Honors Thesis.
Prerequisite: Admission to Honors Program.

GERM 4001 Senior Experience
The Senior Experience requirement for the German major may be satisfied by submitting during the senior year a written paper or project based on one of the following: (1) An upper division course taken during the senior year. The paper or project will be in addition to the general requirements for the course, and will be approved by and submitted to the professor of the course. (2) An approved study abroad experience in a country in which the language of the major is spoken. The paper or project must be proposed before the student goes abroad, and approved by and submitted to the major advisor. This is a no-credit, pass/fail course.
Prerequisite: Senior standing as a German major.

GERM 4301 Genre Studies in German Literature
The study of a major genre such as the novel, drama, poetry, or the short story. May be taken more than once, provided topics vary.
Prerequisite: GERM 3301 or the equivalent.

GERM 4310 Seminar in German Literature
The in-depth study of a single theme, movement, or author in German Literature. May be taken more than once, provided topics vary.
Prerequisite: GERM 3301 or the equivalent.

GERM 4-90 Reading and Conference
Individual work under faculty supervision in areas not covered by other courses.
Prerequisites: 6 upper division hours in German and approval 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, 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.

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 the equivalent.

ITAL 2301 Intermediate Italian
Prerequisite: ITAL 1402 or the equivalent, or consent of instructor.

ITAL 2302 Reading and Composition
Prerequisite: ITAL 2301 or the equivalent, or consent of instructor.

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, LING 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.

UPPER DIVISION

RUSS 3301 Advanced Russian I
An intensive review of Russian grammar, including grammatical exceptions and advanced material not covered in earlier courses. The course will consist of written and oral exercises and reading materials that illustrate the grammar.
Prerequisite: RUSS 2302 or the equivalent.

RUSS 3302 Advanced Russian II
A continuation of the intensive review of Russian grammar, including grammatical exceptions and advanced material not covered in earlier courses. The course will consist of written and oral exercises and reading materials that illustrate the grammar.
Prerequisite: RUSS 3301 or consent of instructor.

RUSS 3303 Russian Culture
A survey of the development of Russian culture from medieval through modern times. Art, architecture, music, and folklore will be emphasized.
Prerequisite: RUSS 2302 or the equivalent.

RUSS 3305 Introduction to Russian Literature I

A study of major works of Russian literature from its beginnings 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 Readings
Independent study in selected areas in preparation for Honors Thesis.
Prerequisite: Admission to Honors Program.

RUSS 4001 Senior Experience
The Senior Experience requirement for the Russian major may be satisfied by submitting during the senior year a written paper or project based on one of the following: (1) An upper division course taken during the senior year. The paper or project will be in addition to the general requirements for the course, and will be approved by and submitted to the professor of the course. (2) An approved study abroad experience in Russia or a comparable language immersion experience at an institution in the U.S. or another country. The paper or project must be proposed before the student begins the study abroad or immersion program, and approved by and submitted to the major advisor. This is a no-credit, pass/fail course.
Prerequisite: Senior standing as a Russian major.

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, 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, 1403 or the equivalent.

SPAN 2302 Intermediate Spanish II
Prerequisite: SPAN 2301 or the equivalent.

UPPER DIVISION

SPAN 3301 Advanced Grammar
Intensive review of Spanish grammar, practical application through written and oral exercises, and through reading of appropriate text materials.
Prerequisite: SPAN 2302 or the equivalent.

SPAN 3302 Advanced Composition and Conversation
Emphasis on study of style and vocabulary. Written and oral reports in Spanish.
Prerequisite: SPAN 2302 or the equivalent.

SPAN 3303 Spanish Phonetics and Phonology
An introduction to Spanish phonetics and phonology involving both theoretical bases and practical applications.
Prerequisite: SPAN 3301 or the equivalent, or consent of instructor.

SPAN 3311 Spanish Civilization
A survey of the social, political, and cultural history of Spain.
Prerequisite: SPAN 2302 or the equivalent, or consent of instructor.

SPAN 3312 Latin American Civilization
A topical approach to the study of the area of Latin America, with readings and lectures on people and landscape, races, revolution and reform, and expression through art.
Prerequisite: SPAN 2302 or the equivalent, or consent of instructor.

SPAN 3321 Spanish Cinema
An examination of a variety of Spanish films from 1960 to the present with a focus on their artistic qualities, the history of Spanish cinema, and the depictions of Spanish culture and literature in the films.
Prerequisite: SPAN 2302 or the equivalent, or consent of instructor.

SPAN 3322 Spanish American Cinema
An examination of a variety of Spanish American films with a focus on their artistic qualities, the history of Spanish American cinema, and the depictions of Spanish American culture and literature in the films.
Prerequisite: SPAN 2302 or the equivalent, or consent of instructor.

SPAN 3330 Introduction to Spanish Literature to 1700
An examination of major literary movements, authors, and works of Spanish Peninsular literature from the Middle Ages to 1700.
Prerequisite: 3 upper division hours in Spanish, or consent of instructor.

SPAN 3331 Introduction to Spanish Literature since 1700
An examination of major literary movements, authors, and works of Spanish Peninsular literature from 1700 to the present.
Prerequisite: 3 upper division hours in Spanish, or consent of instructor.

SPAN 3332 Introduction to Spanish American Literature
An examination of major literary movements, authors, and works of Spanish American literature from 1492 to the present.
Prerequisite: SPAN 2302 or the equivalent, or consent of instructor.

SPAN 3346 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 the 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 NGOs in Spain. (Also listed as BUSN 3346, ECON 3346, and INTL 3346.)
Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of instructor.

SPAN 3371 Introduction to Romance Linguistics
A study of the science of language as it applies to those tongues having their origin in spoken Latin, principally French, Italian, Portuguese, Rumanian, and Spanish. Attention will be given both to historical developments and to the current situations of such languages. (Also listed as CLAS 3371, FREN 3371, ITAL 3371, and LING 3371.)
Prerequisite: Two years or the equivalent of Latin, Ancient Greek, or a Romance language.

SPAN 3372 Internship in Spain
A supervised summer internship in Spain. Students enrolled in SPAN 3372 will serve as interns with various firms, trade groups, governmental agencies, or public interest groups where they will work and gain experience related to the Spanish economy and business world. The nature of the student's responsibilities will vary with the internship involved and be subject to the approval of the supervising faculty member. (Also listed as BUSN 3372, ECON 3372, and INTL 3372.)
Prerequisites: ECON 1311, three additional hours in business or economics, SPAN 2302 or the equivalent, and consent of instructor.

SPAN 3-91 Special Topics
Special study in fields not covered by other courses. Variations in credit according to work performed, from 1-6 hours. May be repeated, provided that topics vary.
Prerequisite: SPAN 2302 or the equivalent, or consent of instructor.

SPAN 3398 Honors Readings
Independent study in selected areas in preparation for Honors Thesis.
Prerequisite: Admission to Honors Program.

SPAN 4001 Senior Experience
The Senior Experience requirement for the Spanish major may be satisfied by submitting during the senior year a written paper or project based on one of the following: (1) An upper division course taken during the senior year. The paper or project will be in addition to the general requirements for the course, and will be approved by and submitted to the professor of the course. (2) An approved study abroad experience in a country in which the language of the major is spoken. The paper or project must be proposed before the student goes abroad, and approved by and submitted to the major advisor. This is a no-credit, pass/fail course.
Prerequisite: Senior standing as a Spanish major.

SPAN 4331 Medieval Spanish Literature
A study of the masterpieces of medieval Spanish literature up to 1500.
Prerequisite: SPAN 3330 or 3331, or consent of instructor.

SPAN 4332 Spanish Golden Age Drama
A study of major works of Spanish Golden Age drama.
Prerequisite: SPAN 3330 or 3331, or consent of instructor.

SPAN 4333 *Don Quijote*
A study of Cervantes' *Don Quijote de la Mancha* in its literary and historical context from a variety of critical perspectives. In addition to the novel itself, the course will include considerable study of secondary sources.
Prerequisite: SPAN 3330 or 3331, or consent of instructor.

SPAN 4334 Nineteenth-Century Spanish Literature
A study of important works of Spanish Romanticism and Realism from a variety of perspectives. Authors studied include Espronceda,

Zorrilla, Larra, Pérez Gáldos, Pardo Bazán, and Bécquer.
Prerequisite: SPAN 3330 or 3331, or consent of instructor.

SPAN 4335 Hispanic Modernism
A study of major authors and works of hispanic modernism and the Generation of '98.
Prerequisite: SPAN 3330 or 3331, or consent of instructor.

SPAN 4336 Twentieth-Century Spanish Literature
A study of important works of Spanish literature of the twentieth century.
Prerequisite: SPAN 3331 or the equivalent, or consent of instructor.

SPAN 4338 Spanish Women Writers
A study of important works by Spanish women authors with emphasis on the place of these texts in the larger Spanish literary tradition.
Prerequisite: SPAN 3331 or the equivalent, or consent of instructor.

SPAN 4342 Spanish American Literature before Modernism
A study of works from the Colonial and Postcolonial period to Modernism from a literary, historical, and cultural perspective. The focus of this course will be the
transition from the colonial period to the formation of national identities.
Prerequisite: SPAN 3332 or the equivalent, or consent of instructor.

SPAN 4343 Twentieth-Century Spanish American Poetry
A study of important works of major poets of the twentieth century from Modernismo and Vanguardismo to the end of the century.
Prerequisite: SPAN 3332 or the equivalent, or consent of instructor.

SPAN 4344 Twentieth-Century Spanish American Novel
A study of important works of novelists of the latter half of the twentieth century.
Prerequisite: SPAN 3332 or the equivalent, or consent of instructor.

SPAN 4345 Twentieth-Century Spanish American Short Story
A study of important works of major short story writers of the twentieth century.
Prerequisite: SPAN 3332 or the equivalent, or consent of instructor.

SPAN 4346 Twentieth-Century Spanish American Drama
A study of important works of Spanish American drama of the twentieth century.
Prerequisite: SPAN 3332 or the equivalent, or consent of instructor.

SPAN 4347 National and Regional Literatures of Spanish America
A study of works from specific nations or regions of Spanish America.

SPAN 4348 Spanish American Women Writers
A study of important works by Spanish American women authors with emphasis on the place of these texts in the larger Spanish American literary tradition.
Prerequisite: SPAN 3332 or the equivalent, or consent of instructor.

SPAN 4349 Sexualities in Literature and Film
A study of contemporary literary and cinematographic works by authors focused on issues of gender and sexuality. This course will be taught in Spanish.
Prerequisites: SPAN 3331 and 3332 or the equivalent, or consent of instructor.

SPAN 4350 History of the Spanish Language
An examination of the development of modern Spanish out of spoken Latin. Emphasis will be placed both on external developments and their linguistic consequences, and on internal change affecting the tongue.
Prerequisite: SPAN 3301 or the equivalent, or consent of instructor.

SPAN 4351 Transnational Mexican Popular Culture
A study of important Mexican popular cultural productions (literature, film, music, television programs) from the 1930s (Post Revolutionary period) to the present through a transnational approach. This course is taught in Spanish.
Prerequisite: SPAN 3332 or the equivalent, or consent of instructor.

SPAN 4-90 Reading and Conference
Individual work under faculty supervision in areas not covered by other courses.
Prerequisites: 6 upper division hours in Spanish and approval of Department Chair.

SPAN 4-91 Special 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 Spanish.

SPAN 4-97 Internship
Supervised off-campus experience in Spanish appropriate to the students' abilities and interests. Includes periodic on-campus meetings with instructor to integrate internship experience with study of Spanish language and culture. Up to 3 hours credit. Pass/Fail.
Prerequisites: Approval of instructor and major advisor.

SPAN 4398, 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 the Senior year.

MUSIC

KENNETH GREENE, D.M.A., Professor
DAVID A. HELLER, D.M.A., Professor
TIMOTHY A. KRAMER, D.M.A., Professor
CARL LEAFSTEDT, Ph.D., Associate Professor; Chair
CHIA-WEI LEE, D.M.A., Associate Professor
LINDA McNEIL, D.M.A., Associate Professor
KIMBERLYN MONTFORD, Ph.D., Associate Professor
DIANE CUMMINGS PERSELLIN, Ed.D., Professor
GARY B. SEIGHMAN, D.M.A., Assistant Professor
CAROLYN E. TRUE, D.M.A., Professor
JAMES V. WORMAN, Ph.D., Associate Professor

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 advisor, 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 advisor and approved by the Department of Music and the registrar by the end of the sophomore year. At this time, the student must make formal application to continue studies toward a degree in music. The sophomore year performance jury will determine upper division status and eligibility for the Bachelor of Music degree.

Requirements for All-Level Music Teacher Certification include the Bachelor of Music degree in Choral, Elementary, or Instrumental Music, and a summer and fifth year internship program, culminating in the Master of Arts in Teaching degree. Music Education students must successfully complete proficiency examinations in keyboard, vocal, and secondary instruments before being assigned to internships.

THE DEGREE - BACHELOR OF ARTS

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

I. The common curriculum

II. Departmental requirements:

A minimum of 42 semester hours in music including: 1000 (7 semesters), 1103, 1104, 1113, 1114, 1203, 1204; 2103, 2104, 2113, 2114, 2203, 2204; 3223, 3341, 3342, 12 credits of Applied Music in one area (8 of which must be at the level of 32-- or above), and 6 credits of large ensemble.

III. Completion of the Senior Experience:
There are four ways to satisfy the Senior Experience requirement for the B.A. in Music:
A. MUSC 4399 Honors Thesis (with permission of the Department)
or B. MUSC 3121 Half Recital (with permission of the Department)
or C. GNED 4300 Senior Interdisciplinary Seminar
or D. The Capstone Course or Senior Thesis students complete for another major

IV. Electives sufficient to achieve 60 hours outside the Department (including the common curriculum), and a total of 124 semester hours.

THE DEGREE - BACHELOR OF MUSIC, MAJOR IN PERFORMANCE

I. The common curriculum

II. Departmental requirements:

A minimum of 81 semester hours in music including: 1000 (7 semesters), 1103, 1104, 1113, 1114, 1203, 1204; 2103, 2104, 2113, 2114, 2203, 2204; 3121, 3223, 3301, 3302, 3341, 3342, 4221, 4301, 4321, 4322, 22 credits of applied music in one area (18 of which must be at the level of 33-- or above), 8 credits of large ensemble, and 9 semester hours electives from upper division music courses.

III. Completion of the Senior Experience: MUSC 4221 (Full Recital).

IV. Electives sufficient to achieve 60 hours outside the Department (including the common curriculum) and a total of 141 semester hours.

THE DEGREE - BACHELOR OF MUSIC, MAJOR IN COMPOSITION

I. The common curriculum

II. Departmental requirements:

A minimum of 81 semester hours in music including: 1000 (7 semesters), 1103, 1104, 1113, 1114, 1203, 1204; 2103, 2104, 2113, 2114, 2203, 2204; 3121, 3223, 3301, 3302, 3303, 3304, 3305, 3341, 3342, 4301, 4302, 4303, 14 credits of applied music in one area (10 of which must be at the level of 32-- or above), 8 credits of large ensemble, and 10 semester hours elective from upper division music courses.

III. Completion of the Senior Experience: MUSC 3121 (Half Recital).

IV. Electives sufficient to achieve 60 hours outside the Department (including the common curriculum) and a total of 141 semester hours.

THE DEGREE - BACHELOR OF MUSIC (PRE-CERTIFICATION), EMPHASIS ON EITHER CHORAL, INSTRUMENTAL, OR ELEMENTARY MUSIC

A four-year program leading to All-Level Teacher Certification upon completion of the degree, Master of Arts in Teaching (fifth year).

I. The common curriculum

II. Departmental requirements:

Choral emphasis:
A minimum of 72 semester hours in music including: 1000 (7 semesters), 1103, 1104, 1113, 1114, 1203, 1204; 2103, 2104, 2113, 2114, 2203, 2204; 3121, 3223, 3225, 3341, 3342, 4301, 18 credits of applied music in one area (14 of which must be at the level of 22-- or above) and 4 credits of applied music in a secondary area, 8 credits of large ensemble, 1161, 3162, 4321, 4361, 4363, and 1 credit of music electives. In addition, 7 semester hours in Education are required, consisting of EDUC 3320 and EDUC 2204 and 2205.

Instrumental emphasis:
A minimum of 72 semester hours in music including: 1000 (7 semesters), 1103, 1104, 1113, 1114, 1203, 1204; 2103, 2104, 2113, 2114, 2203, 2204; 3121, 3223, 3224, 3341, 3342, 4301, 18 credits of applied music in one area (14 of which must be at the level of 22-- or above), 1122 (or 1 credit of applied music in a secondary area), 8 credits of large ensemble, 1161, 2161, 2162, 2163, 2164, 4264, 4361, 4362, and 2 credits of music electives. In addition, 7 semester hours in Education are required, consisting of EDUC 3320 and EDUC 2204 and 2205.

Elementary emphasis:
A minimum of 72 semester hours in music including: 1000 (7 semesters), 1103, 1104, 1113, 1114, 1203, 1204; 2103, 2104, 2113, 2114, 2203, 2204; 3121, 3223, 3224 or 3225, 3341, 3342, 4301, 18 credits of applied music in one area (14 of which must be at the level of 22-- or above) and 4 credits of applied music in a secondary area, 8 credits of large ensemble, 1161, 3162, 4321, 4361, 4364, and 1 credit of music electives. In addition, 7 semester hours in Education are required, consisting of EDUC 3320 and EDUC 2204 and 2205.

III. Completion of the Senior Experience:
MUSC 4363 (Secondary Choral Music Instructional Practices) for Choral emphasis
MUSC 4362 (Secondary Instrumental Music Instructional Practices) for Instrumental emphasis
MUSC 4364 (Elementary Music Methods and Materials) for Elementary emphasis

IV. Electives sufficient to achieve 60 hours outside the Department (including the common curriculum and credits in Education) and a total of 132 semester hours. CSCI 1300 is also required.

V. All-Level Certification requirements may be met by completing a summer session and a fifth year program of studies leading to the Master of Arts in Teaching degree. A minimum of 30 semester hours in Education are required, including EDUC 5339, 5349, 5350, 5351, 5646, 5647, 5948.

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 26 hours including: 1000 (4 semesters), 1103, 1104, 1113, 1114, 1203, 1204; 3341, 3342, 8 credits of applied music in one area (4 of which must be at the level of 22-- or above), and 4 credits of large ensemble.

MUSIC INDIVIDUAL INSTRUCTION COURSES

Individual instruction is provided as follows:

One half-hour lesson per week for a semester earns 1 credit hour.
One three-quarter hour lesson per week for a semester earns 2 credit hours.
One hour lesson per week for a semester earns 3 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
Piano	--04-07
Guitar	--08-11
Organ	--12-15
Clarinet	--16-19
Saxophone	--20-23
Flute	--24-27
Oboe	--28-31
Bassoon	--32-35
Trumpet	--36-39
Trombone	--40-43
French Horn	--44-47
Euphonium	--48-51
Tuba	--52-55
Violin	--56-59
Viola	--60-63
Cello	--64-67
Double Bass	--68-71
Harpsichord	--72-75
Harp	--76-79
Percussion	--80-83

DEPARTMENT OF MUSIC TUITION

Within the framework of a strong liberal arts curriculum, Trinity University provides an outstanding Department of Music. In addition to those students seeking a Bachelor of Music degree, many students apply offerings in the Department of Music toward the Bachelor of Arts degree.

Private instruction in piano, voice, organ, harpsichord, or orchestral instruments is required for all full-time students who major or minor in music and is available as elective study for all other students. Enrollment in applied music is contingent upon the availability of instructional time as determined by the chair. All students who enroll for private instruction in music will pay a special applied music fee of $400.00 per semester.

Approval for private instruction will be given by the chair of the Department of Music when time is available and in the following order of preference:

1. To full-time students who are music majors;
2. To full-time students who are participating in University-sponsored musical organizations;
3. To other full-time students and to part-time students when instructional time is available.

Transfer Students

Transfer students making their initial registration in applied music should register for the courses or levels that would follow the sequence of applied music study completed at the previous institutions. However, if the applied music teacher to whom the student is assigned recommends that a different course or level would be appropriate for the student, such a change must be made at the late registration.

Required Performance Attendance

Each student pursuing courses toward the completion of a major or minor in music is required to enroll in MUSC 1000 Performance Laboratory, grade option 1 (Pass/Fail). Majors must complete a total of 7 semesters, minors a total of 4 semesters. For a passing grade the student must attend 4 laboratory recitals and 6 other appropriate performances during the regular semester. Appropriate performances are those given by Trinity University or guest faculty, students, and/or ensembles.

Music Ensembles

Students majoring in music are required to participate in an appropriate music ensemble each semester unless excused by the Department Chair. (Exception: Bachelor of Arts candidates are strongly recommended but not required to continue after completion of their required six credits of ensemble.) Vocal and instrumental students will participate in the large ensemble most closely related to their applied music performance area. Keyboard students need eight semesters of large ensembles, which may be a combination of large ensemble, accompanying, and piano ensemble, with the approval of their keyboard instructor. Large ensembles are Symphonic Wind Ensemble, University Chorus, Trinity Choir, Jazz Ensemble, Handbell Choir, and Orchestra. Ensembles may be repeated for credit, but no more than 8 semester hours credit may be applied toward a degree.

MUSE 1185 Trinity Choir
The Trinity Choir, a select group of singers, is open to all students by audition at the opening of each semester. In addition to an annual concert tour, the Choir performs in concerts on campus and in the San Antonio area. The music performed by the Choir includes the finest accompanied and a cappella choir music of all periods, both sacred and secular. Open to all students by audition.

MUSE 1186 University Chorus
The University Chorus is open to all Trinity students by audition. Concert programming includes sacred and secular choral music ranging from the 16th century to the present. Emphasized in this course are the development of vocal technique, musicianship, and sight-reading skills. In addition to participation in the Fall and Spring Choral Concerts, the University Chorus combines with the Trinity Choir for the annual Christmas Concert and Christmas Vespers in the fall semester, and joins the Choral Union to perform choral-orchestral masterpieces with the Trinity Symphony Orchestra each spring.

MUSE 1187 Chamber Singers
The Chamber Singers is a group that performs music of a more highly specialized nature than that performed by the other choral organizations. Frequent performances are given at campus and civic functions throughout the year. Open to all students by audition.

MUSE 1188 Women's Chorale
The Women's Chorale is a group of singers who study choral and vocal techniques through the preparation and performance of the wealth

of literature for women's voices. This ensemble performs on and off campus. Open to all women by audition.

MUSE 1189 Trinity Symphony Orchestra
A full orchestra, open to all qualified string, wind, and percussion students by audition. Standard orchestral literature, guest soloists, accompaniment of choral and dramatic productions. Performs on and off campus. Open to all students by audition.

MUSE 1190 Symphonic Wind Ensemble
A select ensemble open by audition to all instrumental students at Trinity University. The Wind Symphony plays selected music from the band repertoire and a wide variety of music for various sizes of wind ensembles. The Wind Symphony performs both on and off campus. Open to all students by audition.

MUSE 1191 Jazz Ensemble
The Jazz Ensembles perform both contemporary and traditional jazz. The ensembles play both on and off campus. Open to all students by audition.

MUSE 1192 Parker Handbell Choir
The Parker Handbell Choir studies the technique of English handbell ringing and performs literature composed for this medium. Open to all students by audition.

MUSE 1193 Chamber Music Ensembles
Ensembles of string, wind, percussion, and/or keyboard instruments (with and without voices) meeting to read and rehearse, giving performances as accomplishment is attained. Open to all students by audition.

MUSE 1194 Piano Ensemble
The preparation and performance under piano faculty supervision of the music literature involving a pianist with another performer, e.g., music for one piano - four hands or for two or more pianos. Improvement of the pianist's sight reading skills is stressed.

MUSE 1195 Opera Workshop
A course in which the principles and techniques involved in musical stage production are applied and result in public performances. Open to all students by audition.

MUSE 1196 Collegium Musicum
A performance course in musics of all eras. Early musical instruments will be used when possible and investigations into the performance practices of the time will be undertaken. Open to all students by audition.

MUSE 1197 Accompanying and Chamber Music for Pianists
The study of the skills of accompanying and chamber music. The preparation and performance under piano faculty supervision of the music literature involving a pianist with another performer, e.g., piano in combination with strings, wind, organ, percussion, and/or voice. Open to all students by audition. 1 hour credit.
Prerequisite: Consent of instructor.

MUSIC COURSES

Theory/Composition

MUSC 1103 Aural Skills I
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.
Prerequisite: 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.
Prerequisite: MUSC 1103 or consent of instructor.

MUSC 1113 Keyboard Skills I
This course will develop basic skills in playing the keyboard that reinforce the topics presented in MUSC 1203. A variety of exercises will cover scales, chords, and progressions.
Corequisites: MUSC 1203 and 1103 or consent of instructor.
Prerequisite: MUSC 1301 or placement exam.

MUSC 1114 Keyboard Skills II
A continuation of MUSC 1113. This course will develop basic skills in playing the keyboard that reinforce the topics presented in MUSC 1204. A variety of exercises will cover scales, chords, and progressions..
Corequisites: MUSC 1204 and 1104 or consent of instructor.
Prerequisite: MUSC 1113 or consent of instructor.

MUSC 1203 Music Theory I
Foundations for a study of music theory and literature. This course will include a study of the elements and forms of music, e.g., melody, harmony, and rhythm, through a variety of analytical tools that include notation.
Corequisites: MUSC 1103 and 1113 or consent of instructor.
Prerequisite: MUSC 1301 or placement exam.

MUSC 1204 Music Theory II
A continuation of MUSC 1203. Foundations for a study of music theory and literature. This course will include a study of the elements and

forms of music, e.g., melody, harmony, and rhythm, through a variety of analytical tools that include notation.
Corequisites: MUSC 1104 and 1114 or consent of instructor.
Prerequisite: MUSC 1203 or consent of instructor.

MUSC 1301 Foundations of Communication Through Music
Designed for students with little or no background in music theory, this course is an introduction to the rhythmic, melodic, and harmonic rudiments used for communication through music in Western Europe and the New World. Correlated materials in reading notation, ear-training, keyboard harmony, and original compositions are included.

MUSC 1302 Class Composition
An introduction to composition with emphasis on creativity and basic craftsmanship. The course will include studies of selected compositions and compositional problems, and the creation of individual short works.
Prerequisite: MUSC 1301 or consent of instructor.

MUSC 2103 Aural Skills III
A continuation of MUSC 1104. This course will focus on developing aural recognition of the elements of music in diatonic and chromatic harmony through a variety of exercises in music dictation and sight singing.
Corequisites: MUSC 2203 and 2113 or consent of instructor.
Prerequisite: 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.
Prerequisite: 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.
Prerequisite: 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.
Prerequisite: 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 nineteenth century Western music. Continued study of melody, harmony, rhythm, and analysis.
Corequisites: MUSC 2103 and 2113 or consent of instructor.
Prerequisite: 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 nineteenth century Western music and uses of tonal and atonal materials in the twentieth century. Continued study of melody, harmony, rhythm, and analysis.
Corequisites: MUSC 2104 and 2114 or consent of instructor.
Prerequisite: MUSC 2203 or consent of instructor.

MUSC 3301 Forms and Analysis
An in-depth study of structures and harmonic designs of various genres in Western music from the 17th through the 20th centuries. Emphasis will be placed on the development of analytical skills.
Prerequisite: MUSC 2204.

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.
Prerequisite: MUSC 2204.

MUSC 3303, 3304 Composition
Composition in short forms for voice and solo instruments. 3 class hours a week for 2 semesters.
Prerequisites: MUSC 2204 and consent of instructor.

MUSC 3305 Electronic Music
Instruction in the principles of electro-acoustic music, including analog and digital synthesis, sound modulation, and sound reproduction; the production of individual and group compositions; discussion of related contextual problems and a survey of recent electronic music.

MUSC 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.
Prerequisite: MUSC 2204.

MUSC 4302, 4303 Composition
A continuation of MUSC 3303, 3304. Composition in larger forms and for larger aggregations of voices and instruments. 3 class hours a week for 2 semesters.
Prerequisites: MUSC 3304 and consent of instructor.

MUSC 4-11, 4-12, 4-13, 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.

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 semesters) or minor (4 semesters) in music.

MUSC 1121 Beginning Class Voice I
A study of the fundamentals of vocal production including breath control, posture, diction, tonal concepts, and phrasing. In addition, aspects of music notation and reading will be addressed. Techniques covered in class are applied to the performance of basic solos and vocal functions in choral situations. This course does not satisfy the Class Voice requirement as stated in the Instrumental Music Education (pre-certification) curriculum.

MUSC 1122 Beginning Class Voice II
This course is a continuation of MUSC 1121, with a particular emphasis on aspects of vocal production related to the preparation and performance of ensemble voices in an educational setting. This course satisfies the Class Voice requirement as stated in the Instrumental Music Education (pre-certification) curriculum.

MUSC 1123 Beginning Class Piano I
A study of the rudiments of piano performance designed for elementary education majors and other students who have had no previous piano study. Competency in reading music, ensemble playing, and solo repertory are stressed.

MUSC 1124 Beginning Class Piano II
A continuation of the studies initiated in 1123 along with the introduction of harmonization of short melodies and transpositions. Spring.
Prerequisite: MUSC 1123 or consent of instructor.

MUSC 1125 Beginning Class Guitar I
A study of the rudiments of guitar performance designed for education majors and other students who have no previous guitar study. Competency in reading music, ensemble playing, and solo repertory is stressed.

MUSC 1126 Beginning Class Guitar II
A continuation of the studies initiated in 1125. The rudiments of reading, ensemble playing, and solo repertory in guitar performance are presented in greater depth.
Prerequisite: MUSC 1125 or consent of instructor.

MUSC 2221 Repertoire Development
The selection, study, and performance of music appropriate to the student's voice or instrument in preparation for recital and public performance. May be repeated up to a total of four hours credit.
Prerequisite: Consent of instructor.

MUSC 3121 Half Recital
One half of a shared program presented in public usually during the junior or senior year. Required of all Bachelor of Music candidates. Composition students will present original works but not necessarily perform them. This course fulfills the Senior Experience requirement of the University's Common Curriculum for the Bachelor of Arts in Music and the Bachelor of Music in Composition if taken in the senior year.
Prerequisite: Applied music level of 33--.

MUSC 3221, 3222 Diction for Singers I, II
A study of Italian, German, French, and English diction as used in vocal performance, emphasizing preparation of selected literature.
Prerequisite for MUSC 3221: 1201.
Prerequisite for MUSC 3222: 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. This course fulfills the Senior Experience requirement of the University's Common Curriculum for the Bachelor of Music in Performance if taken in the senior year.
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 different applied fields.
Prerequisite: Consent of instructor.

MUSC 4322 Applied Music Literature
Principal composers, styles and types of performance literature for 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 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 Walküre. Previous music 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 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 1345 Women and Music
A historical, sociological, and artistic study of the contributions of women to the history of music in the western world from the ninth century to the present. Ability
to read music 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 1349 African American Music
A survey of 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
This course explores the music of various cultures around the world. Using the case study approach, students will learn about the music and sociology of selected regions that may include West Africa, Asia, India, and the American Southwest. Students will undertake fieldwork in San Antonio to gain practical experience in ethnomusicological fieldwork. This is an introductory course appropriate for non-majors as well as music students. No prior musical experience is required, but students without musical backgrounds must learn a vocabulary of terms for describing musical sound. (Also listed as ANTH 1351.)

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.

MUSC 2340 Creative Thinking and the Artistic Process
This course encourages students to synthesize a theoretical and experiential approach to the creative process as studied through the visual arts, music, creative writing, and theatre. Students enter into the creative process as a means to develop creative self-expression, aesthetic sensibility, and an understanding of the arts. The nature and drive of artistic endeavor is explored through studies of the lives of significant thinkers and artists, examination 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, DRAM 2340, ENGL 2340, and GNED 2340.)

MUSC 3341 Music History I: Ancient Greece to Mozart
A survey of music in the Western art music tradition, beginning with ancient Greece and continuing through the music of the late eighteenth century. Important composers covered include Bach, Handel, Vivaldi, Monteverdi, Palestrina, Josquin, Haydn, and Mozart. Although designed as Part I of a two-semester history sequence, this course may be taken independently.
Prerequisite: MUSC 1204 or consent of instructor.

MUSC 3342 Music History II: Beethoven to the Present
A survey of important figures and developments in Western art music from the late Classical era through the present, beginning with the

music of the late eighteenth century, continuing with Beethoven, Berlioz, Schubert, and other nineteenth-century composers, and concluding 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.
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 3346 Survey of Symphonic Literature
Study of symphonic literature of 18th-20th centuries with reference to style, structure and instrumental techniques involved in representative compositions of major composers.
Prerequisite: Consent of instructor.

MUSC 3347 The Art Song
A historical survey of the development of the Art Song by nationality as well as stylistic periods from the 17th century to the present. Ability to read music helpful.
Prerequisite: MUSC 1301, 1340 or consent of instructor.

MUSC 3349 Music and Religion
An examination of the role of music in the worship practices of the major denominations of Judaism, Islam, and Christianity. Particular emphasis will be given to the historical development within each group of liturgical forms, important religious festivals, liturgical books and materials, and doctrinal issues related to gender, propriety of musical styles and practices, texts, and the use of instruments. The contributions of leading composers will be discussed.
Prerequisite: MUSC 1301 or 1203 or consent of instructor.

MUSC 3350 Mozart
Two centuries after his death, Wolfgang Amadeus Mozart remains one of the most compelling figures in music history due to the extraordinary quality of the music he wrote and to the numerous legends that swirled about him from childhood onward. This course is a critical examination of Mozart's life and works. Using biographies, Mozart's own letters, and evidence in the music itself, we will explore how the image of a divinely-inspired child genius arose during his lifetime, and how that image continued to shape his reputation for later generations of listeners, including our own.
Prerequisite: MUSC 1204 or consent of instructor.

MUSC 3351 Culture and Creativity in the Middle Ages and Renaissance
A course focusing on the interrelation of art, music, literature, and history at significant moments in the Middle Ages and Renaissance. The goal is to make it possible for students to draw new connections between the areas of culture dealt with in the course. The syllabus may include such important cultural figures and works as: Charlemagne, Gregorian chant, *The Song of Roland*, Thomas Aquinas, motets, Michaelangelo, and Shakespeare. The course will combine lectures with detailed work in discussion sections. (Also listed as ARTH 3338, ENGL 3305, and MDRS 3301.)

MUSC 3-90 Directed Studies
Individual study and research in areas not covered by other courses. 1 to 4 semester hours.
Prerequisites: 12 semester hours of music and approval of the Department Chair.

MUSC 3-91 Special Topics in Music
Special studies in areas not covered by other courses. May be taken more than once provided topics vary. Maximum credit six hours.
Prerequisite: Consent of instructor.

MUSC 3398 Honors Readings
Independent study in selected areas in preparation for Honors Thesis. May be taken for up to three hours of credit.

MUSC 4-90 Directed Studies
Individual study and research in areas not covered by other courses. 1 to 6 semester hours.
Prerequisites: 6 semester hours of music in the upper division and approval of the Department Chair.

MUSC 4391, 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, 4399 Honors Thesis
Individual research and scholarly investigation under faculty supervision leading to the preparation of an Honors Thesis. This two-course sequence fulfills the Senior Experience requirement of the University's Common Curriculum for the Bachelor of Arts in Music.
Prerequisite: Senior standing.

Music Education

MUSC 1161 Introduction to Music in American Schools

Objectives and procedures in learning and teaching music in the elementary and secondary schools through presentations and in school observations.
Prerequisites: MUSC 1301, 1203, or consent of instructor.

MUSC 2161 Instrumental Fundamentals - Brass
A study of methods of teaching brass instruments. Through direct hands-on playing of instruments and a study of applicable method books, students will develop a fundamental knowledge and basic technique of each instrument in the brass section.

MUSC 2162 Instrumental Fundamentals - Percussion
A study of methods of teaching percussion instruments. Through direct hands-on playing of instruments and a study of applicable method books, students will develop a fundamental knowledge and basic technique of each instrument in the percussion section.

MUSC 2163 Instrumental Fundamentals - Strings
A study of methods of teaching string instruments. Through direct hands-on playing of instruments and a study of applicable method books, students will develop a fundamental knowledge and basic technique of each instrument in the string section.

MUSC 2164 Instrumental Fundamentals - Woodwinds
A study of methods of teaching woodwind instruments. Through direct hands-on playing of instruments and a study of applicable method books, students will develop a fundamental knowledge and basic technique of each instrument in the woodwind section.

MUSC 2361 Music in Childhood
A study of the instructional approaches suited to the cognitive, physical, and affective development of children in early and middle childhood. Students will acquire basic music skills and understandings in order to provide music experiences in the classroom.

MUSC 2362 Music in Early Childhood
Identifying, understanding, and guiding musical needs of young children. Methods and materials for program development for students seeking kindergarten endorsement or interested in teaching primary grades.

MUSC 3162 Instrumental Music Techniques
An overview of beginning orchestral and band experiences. Students will be introduced to the four families of instruments and will observe these instruments being taught in the middle schools.
Prerequisite: MUSC 1161.

MUSC 4264 Marching Band and Jazz Instrumental Practices
A study of the unique stylistic, pedagogical, and organizational demands relative to marching bands and jazz ensembles in the middle and secondary school setting. Students will develop an understanding of and personal approach to teaching and rehearsing these unique groups in the context of a music education philosophy.
Prerequisite: MUSC 2204.

MUSC 4361 Elementary Music Instructional Practices
Music programming, instruction, and organization of music in general music classes, kindergarten through eighth grade.
Prerequisite: MUSC 1161.

MUSC 4362 Secondary Instrumental Music Instructional Practices
A study of the organization, functions, materials, and instructional practices relative to instrumental music ensembles in the middle and secondary school setting. Students will develop an understanding of and personal approach to teaching and rehearsing music in the context of a music educational philosophy. This course fulfills the Senior Experience requirement of the University's Common Curriculum for the Bachelor of Music (Pre-Certification) with Instrumental Emphasis.
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. This course fulfills the Senior Experience requirement of the University's Common Curriculum for the Bachelor of Music (Pre-Certification) with Choral Emphasis.
Prerequisites: MUSC 1161, 3223, and Senior standing.

MUSC 4364 Elementary Music Methods and Materials
This course will deal with the European and American music education methods such as Orff Schulwerk, Kodaly, Dalcroze Eurhythmics, Comprehensive Musicianship, and Gordon. Music education technology, global music for children, and early childhood music education will also be addressed. This course fulfills the Senior Experience requirement of the University's Common Curriculum for the Bachelor of Music (Pre-Certification) with Elementary Emphasis.
Prerequisites: MUSC 4361 and Senior standing.

NEUROSCIENCE

FACULTY ADVISORY COMMITTEE:

MARK BRODL, Ph.D., George W. Brackenridge Distinguished Professor of Biology
PAULA T. HERTEL, Ph.D., Professor of Psychology
JESSICA HOLLENBECK, Ph.D., Assistant Professor of Chemistry
MICHELE A. JOHNSON, Ph.D., Assistant Professor of Biology
KIMBERLEY PHILLIPS, Ph.D., Associate Professor of Psychology
JAMES L. ROBERTS, Ph.D., Cowles Distinguished Professor of Biology; Chair

THE MAJOR

The Bachelor of Science in Neuroscience is a multi-disciplinary program designed to provide an understanding of the nature and functioning of the nervous system from the molecular to the behavioral level. Courses, taught by faculty from the Biology, Psychology, and Chemistry departments, offer a broad spectrum of topics and approaches to the study of neural systems' structure and function. The major offers an opportunity for students to engage in supervised research in neuroscience and related areas and provides valuable experience to students interested in pursuing careers in the health professions or graduate study. Double majors in neuroscience and biology are not permitted.

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

I. The common curriculum

II. Specific degree requirements (46-50 semester hours)

A. Core curriculum in neuroscience (8 hours):

NEUR 2310	Introduction to Neuroscience
NEUR 2110	Introductory Laboratory in Neuroscience
NEUR 3447	Neurobiology
NEUR 4000	Neuroscience Seminar (four semesters)

B. Supporting courses in biology (9 hours):

BIOL 1311	Integrative Biology I
BIOL 1111	Introductory Biology Laboratory
BIOL 1312	Integrative Biology II
BIOL 1212	Methods for Biological Problem Solving

C. Supporting courses in chemistry (8 hours):

CHEM 1318	Chemistry in the Modern World
CHEM 1118	Introduction to Analytical Methods
CHEM 2319	Organic Chemistry
CHEM 2119	Laboratory Methods in Organic Chemistry

D. Supporting courses in psychology (8 hours):

PSYC 2401	Statistics and Methods I
PSYC 2402	Statistics and Methods II

E. Three elective courses from the following set, at least one in each discipline* (10-11 hours):

BIOL 3432	Vertebrate Physiology
BIOL 3440	Animal Behavior
BIOL 3443	Developmental Biology
BIOL 3446	Cell Biology
BIOL --91	Selected Topics (3 hours, advisory approval required)
PSYC 2312	Principles of Learning
PSYC 2330	Fundamentals of Cognition
PSYC 3311	Sensation and Perception
PSYC 3331	Memory and Cognition
PSYC 3333	Simulation of Neural and Cognitive Processes
PSYC 3360	Special Topics in Psychology (advisory approval required)
PSYC 4390	Senior Seminar in Psychology (advisory approval required)

* Students who double major in neuroscience and psychology are required to take two biology electives and one psychology elective.

F. The Senior Experience (3-6 hours):

NEUR 4-90	Independent Research in Neuroscience A minimum of 3 hours must be accumulated. With approval of the advisory committee, BIOL 4398 and 4399 or PSYC 4395 and 4396 may be substituted. Alternatively, students may meet this requirement by completing at least 1 hour of

4-90 plus a minimum of two other research hours, with approval of the advisory committee.

III. Electives sufficient to total 124 semester hours.

GUIDELINES FOR ACCEPTANCE OF MAJORS

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

Completion of NEUR 2310/2110, BIOL 1311/1111, CHEM 1318/1118, and PSYC 2401 with a grade of C or better.
An overall grade point average of at least 2.0.

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 3.33, and "A" in BIOL 4398 and 4399 or PSYC 4395 and 4396 (thesis research in Biology or Psychology).

To apply for graduation with Honors in Neuroscience, students should address a written request for consideration to the Faculty Advisory Committee. The request must be received no later than the first full week of the student's final semester before graduation. The decision to confer or not to confer Honors will be made by the Advisory Committee and the Thesis 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.)

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-science majors and science majors. Spring semester only. (Also listed as PSYC 2110.)
Prerequisite or corequisite: NEUR/PSYC 2310.

NEUR 3447 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. 3 class hours and 3 laboratory hours a week for one semester. Additional hours are required to monitor experiments. (Also listed as BIOL 3447.)
Prerequisites: BIOL 1312, 1212, CHEM 2319, 2119.

NEUR 4000 Neuroscience Seminar
This course is built around student presentations of independent research in neuroscience (NEUR 4390) and seminars from occasional external speakers. Neuroscience majors are required to register for this course each semester of their junior and senior years. The course is also open to other students interested in neuroscience.

NEUR 4-90 Independent Research in Neuroscience
Independent empirical research arranged with a faculty member on problems in neuroscience. Results of the project are presented in written and oral form. A minimum of 3 semester hours is required for the major, and a maximum of 6 semester hours is allowed. The research topic must be approved by the Faculty Advisory Committee. This course fulfills the Senior Experience requirement of the University's Common Curriculum.
Prerequisites: Consent of instructor.

NEW MEDIA

FACULTY ADVISORY COMMITTEE:

WILLIAM G. CHRIST, Ph.D., Professor, Communication
AARON DELWICHE, Ph.D., Assistant Professor, Communication; Chair
ROBERT HUESCA, Ph.D., Professor, Communication
MARK B. GARRISON, Ph.D., Alice P. Brown Professor of Art and Art History
J. PAUL MYERS, JR., Ph.D., Professor, Computer Science
PATRICIA SIMONITE, M.F.A., Associate Professor, Art and Art History

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 William Christ; each student will then be assigned to a minor advisor.

THE MINOR

The requirements for a minor in New Media are:
21 semester hours, with no more than 9 hours in any one subject area, and at least 9 upper division hours.

Required courses: 12 hours

ART 2380	Digital Art
ARTH 1308	Art History II: Renaissance to Modern Art
*COMM 3344	Interactive Multimedia Communication [one of three topics: 1) Web Design; 2) Interactive Narratives; 3) Games for the Web]
CSCI 1304	Computers and Society (or higher level CSCI course)

Elective courses: 9 hours with 6 hours in "Application" and 3 hours in "Context"

Application: 6 hours

ART 3380	Advanced Digital Art
*COMM 3340	Media Writing: Reporting on/for the Internet
*COMM 3344	Interactive Multimedia Communication [one of three topics not already taken: 1) Web Design; 2) Interactive Narratives; 3) Games for the Web]
CSCI 3353	Graphics
ENGR 1381	Engineering Analysis and Design I
MUSC 3305	Electronic Music

Context: 3 hours

ART 3314	Issues in Contemporary Art
ARTH 3360	Twentieth-Century Art
ARTH 3365	Contemporary Architecture
CLAS 1306	Ancient Science and Technology
COMM 3328	Media, Culture, and Technology
DRAM 2310	Principles of Design
ENGL 3330	Literature and the Visual Arts
PHIL 3331	Philosophy of Mind
PHIL 3350	Philosophy of Culture
PHIL 3355	Aesthetics
PSYC 2330	Fundamentals of Cognition
PSYC 3341	Social Psychology

* Note: Courses are approved by the New Media minor committee only for the specific topic listed.

PHILOSOPHY

CURTIS BROWN, Ph.D., Professor
ANDREW KANIA, Ph.D., Assistant Professor
LAWRENCE D. KIMMEL, Ph.D., Professor
STEVEN LUPER, Ph.D., Professor; Chair
JUDITH R. NORMAN, Ph.D., Professor

THE MAJOR

To be accepted as a major in philosophy, students must have taken Introduction to Philosophy (PHIL 1301) or Ethics (PHIL 1354). The requirements for the degree of Bachelor of Arts with a major in philosophy are as follows:

I. The common curriculum

II. Departmental requirements:

A. 33 hours in philosophy, at least 24 of which must be upper division.
B. All of the following four courses:
PHIL 1301 Introduction to Philosophy
PHIL 2340 Symbolic Logic I
PHIL 3320 Classical Greek Philosophy
PHIL 3322 Early Modern Philosophy
One of the following two courses:
PHIL 3323 German Idealism
PHIL 3326 Nietzsche and German Philosophy
One of the following two courses:
PHIL 3330 Metaphysics
PHIL 3339 Epistemology
One of the following four courses:
PHIL 4391 Seminar on a Philosophical Problem
PHIL 4392 Seminar on a Philosopher
PHIL 4393 Seminar on a Philosophical Movement
PHIL 4395 Senior Thesis
C. Senior Experience: The Senior Experience may be completed in any one of the following three ways:
i. PHIL 4395 Senior Thesis
ii. A Senior Essay, reflecting an intensive study of the recent literature on a philosophical topics, and written under the supervision of a faculty advisor during the senior year, while enrolled in any upper-division philosophy course. (Requires permission of the instructor and simultaneous enrollment in PHIL 4001.)
iii. An approved Senior Experience course from a student's second major.

III. Electives sufficient to total 124 hours.

THE MINOR

The requirements for a minor in philosophy are as follows:

A. 18 hours in philosophy, 15 of which must be upper division.
B. Required courses:
PHIL 1301 Introduction to Philosophy
One of the following two courses:
PHIL 3320 Classical Greek Philosophy
PHIL 3322 Early Modern Philosophy

COURSES

LOWER DIVISION

PHIL 1301 Introduction to Philosophy
An introduction to philosophy emphasizing central issues in epistemology, metaphysics, and ethics. The course will focus on major philosophical figures (such as Plato, Aristotle, Descartes, Locke, Hume, Kant, Hegel, and Marx).

PHIL 1302 Introduction to Asian Philosophy
An introduction to the classical philosophical traditions of Asia - Hinduism, Buddhism, Confucianism, and Taoism - with an emphasis on their approach to major philosophical questions.

PHIL 1341 Tools for Reasoning
Reasoning is the process of using the evidence available to us in order to make informed decisions about what to believe and do. Good reasoning requires the ability to identify and assess deductive arguments; to formulate hypotheses, test them, and choose those that are best supported by the evidence; and to assess which courses of action are most reasonable given our beliefs and values. This class will introduce a number of tools that are useful for reasoning, including deductive logic, probability and statistics, and decision theory. The course will also consider problem-solving techniques and ways of evaluating the credibility of sources.

PHIL 1354 Ethics
An introduction to traditional and contemporary problems and theories in ethics.

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 PHIL 1341 as a prerequisite.

PHIL 2350 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.

PHIL 2356 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 that may be covered include: abortion; genetic engineering; environmental justice; urban issues such as group discrimination, housing restrictions, regulation of vice, and city planning; and business issues such as economic justice, corporate responsibility, risk assessment, truth in advertising, and whistle blowing.
Prerequisite: PHIL 1354.

PHIL 2357 The Meaning of Life
A critical examination of a wide range of approaches to the question, 'Does life have meaning?' Among the philosophers to be covered are Aristotle, Tolstoy, Kant, Schopenhauer, Nietzsche, Camus, Miguel de Unamuno, and Thomas Nagel.

UPPER DIVISION

History of Philosophy

PHIL 3320 Classical Greek Philosophy
A study of the major figures in ancient Greek philosophy from Thales to Aristotle, with a special focus on thinkers of the high classical period: Socrates, Plato, and Aristotle.
Prerequisite: PHIL 1301 or consent of instructor.

PHIL 3321 Hellenistic Philosophy
A study of the dominant philosophical schools after the death of Aristotle - Stoics, Epicureans, and Skeptics - with some treatment of later developments, e.g., Neoplatonism.
Prerequisite: PHIL 1301 or consent of instructor.

PHIL 3322 Early Modern Philosophy
A study of the classical modern philosophers, including the Rationalists: Descartes, Leibniz, and Spinoza; the Empiricists: Locke, Berkeley, and Hume; and the attempted synthesis of Kant.
Prerequisite: PHIL 1301.

PHIL 3323 German Idealism
A study of important thinkers and movements at the beginning of the 19th century. We will focus initially on Kant, and investigate how German Idealism and Romanticism developed in the aftermath of Kant's critical philosophy. After an extended treatment of Hegel, we will look at the Young Hegelians and Marx. The course will focus on issues in metaphysics, epistemology, the philosophy of history, and the problem of subjectivity.
Prerequisite: PHIL 1301.

PHIL 3324 Pragmatism
A study of American pragmatic philosophy. The emphasis will be on Peirce, James, and Dewey; some attention will be paid to such contemporary figures as Quine and Rorty.
Prerequisites: PHIL 1301 and 3322.

PHIL 3325 Existentialism
The development of existential thought from the writings of Kierkegaard and Nietzsche to more recent work by Heidegger, Sartre, and Camus.
Prerequisites: PHIL 1301 and 3322.

PHIL 3326 Nietzsche and German Philosophy
A study of 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.
Prerequisite: PHIL 1301.

PHIL 3327 The Philosophies of India
A study of the classical traditions of Buddhist and Indian (Hindu) philosophies. The emphasis will be on issues of perennial philosophical concern to both Eastern and Western thought such as: the nature of the self and the problem of personal identity, monism and pluralism, immortality and reincarnation, knowledge and illusion.
Prerequisite: PHIL 1301.

PHIL 3328 The Philosophies of China
A study of the three major indigenous philosophical movements in China: Confucianism, Taoism, and Neo-Confucianism. Special attention will be paid to themes and problems common to all three movements, including: the metaphysics of harmony and conflict, the individual and society, the cultivation of human virtues and human perfectibility, and humankind's relation to nature.
Prerequisite: PHIL 1301.

PHIL 3329 **Continental Philosophy**
A close reading of some of the major texts of twentieth-century French and German philosophy, with some attention to their roots in nineteenth-century philosophy.
Prerequisites: PHIL 1301 and 3322.

Metaphysics

PHIL 3330 **Metaphysics**
A survey of traditional and contemporary philosophical issues about the nature of reality. Typical topics covered include some of the following: the mind-body problem, personal identity, free will and determinism, causation, time, fatalism, universals and particulars, essentialism, possible worlds.
Prerequisites: PHIL 1301 and 3322.

PHIL 3331 **Philosophy of Mind**
A critical study of contemporary approaches to the mind-body problem, including dualism, behaviorism, the identity theory, and functionalism. Also addressed will be such other issues as the nature of mental representation, the possibility of artificial intelligence, and the sources of intentionality.
Prerequisite: PHIL 1301.

PHIL 3332 **Philosophy of Science**
A study of philosophical views about the sciences. Topics may include: explanation, confirmation, the historical development of science, realism vs. anti-realism, the relation between the natural and social sciences, and the difference between science and pseudo-science.
Prerequisites: Either PHIL 1301 and either 2340 or 9 hours in any of the natural or social sciences.

PHIL 3333 **Philosophy of Language**
A critical study of contemporary issues about language, meaning, reference, translation, and interpretation.
Prerequisites: PHIL 1301 and 2340.

PHIL 3338 **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 3360.)
Prerequisite: PHIL 1301 or 3 semester hours in the academic study of religion.

PHIL 3339 **Epistemology**
A critical study of problems in the theory of knowledge, such as: the difference between knowledge and belief; the possibility of knowledge; the conditions under which a belief is rational.
Prerequisites: PHIL 1301 and 3322.

Advanced Logic

PHIL 3340 **Symbolic Logic II**
Topics include: Review of first-order logic from a more abstract perspective than that taken in PHIL 2340; introduction to set theory; basic metalogical results including soundness, completeness, compactness, the Löwenheim-Skolem theorem, and Gödel's incompleteness theorems; connections with issues in computability theory and the foundations of mathematics.
Prerequisite: PHIL 2340 or CSCI 1323 or consent of instructor.

PHIL 3343 **Non-Classical Logics**
Extensions of, and alternatives to, classical logic. Possible topics include modal logic, intuitionist logic, many-valued logic, and fuzzy logic. Some attention to connections between these logics and topics in philosophy, computer science, and other areas
Prerequisite: PHIL 2340 or consent of instructor.

Value Theory

PHIL 3350 **Philosophy of Culture**
Inquiry into the different forms and forces which shape contemporary life. The value and impact of art, science, and social, economic, and political technology as determinants of an emerging culture in the 21st century.
Prerequisites: PHIL 1301 and either 3320 or 3322.

PHIL 3351 **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: PHIL 1354.

PHIL 3352 **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: PHIL 1354.

PHIL 3353 **Philosophy of Law**
A critical study of legal theory, legal reasoning, and the role of law in contemporary society.
Prerequisite: PHIL 1354.

PHIL 3354 **Philosophy of Gender**
A study of issues in the philosophy of gender, through reading the work of historical and contemporary theorists. Topics may include the ontology of sex, gender, and sexuality; the nature and goals of feminism; homosexual rights; the ethics of consent, pornography, and

prostitution; and gendered language.
Prerequisite: One of PHIL 1301, WAGS 2350, 2351, 2352.

PHIL 3355 Aesthetics
A study of issues in the philosophy of the arts, through the examination of works of art and the reading of historical and contemporary philosophers and critics. Topics to be discussed include: what makes something a work of art, the nature of artistic representation, the evaluation of works of art, and problems peculiar to such specific art forms as literature, painting, music, and film.
Prerequisite: PHIL 1301.

PHIL 3356 Marx and Marxism
In this class, students will study the ideas of Karl Marx and the impact they have had on 20th century thought. The class will have two components: the philosophy of Marx and the contemporary application of Marxist principles to various problems and disciplines.
Prerequisite: Sophomore standing.

PHIL 3357 Philosophy of Film
A study of issues in the philosophy of film, through reading the work of historical and contemporary philosophers and critics, and studying films. Topics may include: the nature of film, its status amongst the arts, issues of authorship and narrativity, issues of interpretation, and the nature and ethics of documentary.
Prerequisite: One of PHIL 1301, FILM 1301, 2301.

PHIL 3358 Philosophy of Music
In this course we will investigate several philosophical issues raised by music, from the question of what exactly music is, through the nature of various musical objects (works, performances, recordings), to how we should approach music, and what its value is. Throughout we will question how far the theories we discuss can be applied beyond their (typical) application to Western classical music. Students will be expected to bring their experience – as composers, performers, and listeners – to bear on the issues we discuss. (Also listed as MUSC 3358.)
Prerequisite: PHIL 1301, MUSC 1301, 1203, or consent of instructor.

PHIL 3359 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.
Prerequisite: PHIL 1354.

PHIL 3360 Philosophy of Literature
In this course we will investigate several philosophical issues raised by literature, such as what exactly literature is, the nature of literary authorship and interpretation, why it is we respond emotionally to fictional characters, and what the value of engaging with literature is. (Also listed as ENGL 3339.)
Prerequisite: PHIL 1301 or six hours of credit in English.

Seminars and Special Courses

Successful completion of 6 upper-division hours in philosophy is a prerequisite for all courses in this category.

PHIL 3-90 Directed Studies
Individual work under faculty supervision. 1 to 3 semester hours.
Prerequisite: Consent of instructor.

PHIL 4001 Senior Experience
Philosophy majors may satisfy the Senior Experience requirement of the University's Common Curriculum by completing this class while enrolled in any upper-division course. Students will write a Senior Essay, reflecting an intensive study of the recent literature on a philosophical topic, under the supervision of a faculty advisor. This is a pass/fail, no-credit course.
Prerequisites: Senior standing and consent of instructor.

PHIL 4-90 Directed Studies
Individual work under faculty supervision. 1 to 3 semester hours.
Prerequisite: Consent of instructor.

PHIL 4391 Seminar on a Philosophical Problem
An in-depth study of a contemporary problem in philosophy.
Prerequisite: 6 upper-division hours or consent of instructor.

PHIL 4392 Seminar on a Philosopher
A careful analysis of the work of a particular philosopher. Topics may vary but include: A. Aristotle; B. Austin; D. Descartes; E. Hegel; F. Locke; K. Kant; M. Marx; P. Plato; W. Wittgenstein; Z. other figures.
Prerequisite: 6 upper-division hours.

PHIL 4393 Seminar on a Philosophical Movement
An intensive study of the works of the philosophers in a particular philosophical school or movement. The seminar may take a chronological approach or it may be topical in structure.
Prerequisite: 6 upper-division hours in philosophy.

PHIL 4395 Senior Thesis
Research and classroom discussion culminating, for each student, in a thesis to be defended before Philosophy Department faculty. Supervision for thesis provided by course instructor and a second faculty member with expertise in student's area of research.
Prerequisites: Senior standing and consent of the Department Chair.

PHYSICAL EDUCATION

AMIE BRADLEY, B.B.A., Instructor; Coach
JENNIFER BREUER, M.S., Instructor; Coach; Coordinator of Physical Education and Wellness
PATRICK J. CUNNINGHAM, M.S., Instructor; Coach
NICOLE SMITH, M.Ed., Instructor; Coach
JULIE B. JENKINS, M.S., Instructor; Coach
LANCE KEY, B.A., Instructor, Coach
PAUL McGINLAY, B.A., Instructor; Coach
STEVEN M. MOHR, M.Ed., Instructor; Coach
GEORGE POWELL, B.S., Instructor; Athletic Trainer
JOHN RYAN, M.A., Instructor; Coach
TIM SCANNELL, B.S., Instructor, Coach
DAVID SVOBODA, M.S., Instructor, Coach
JACOB TINGLE, M.A.A., Instructor, Business Administration; Director of the Physical Education Minor

THE MINOR

Students can complete a minor by completing a concentration of 18 hours, 9 of which must be upper division. A maximum of 3 hours may be taken in activity courses. By completing the minor, the students will be able to satisfy the majority of prerequisites for graduate programs such as physical or occupational therapy, exercise science, physiology of exercise, and sports medicine. No courses may be taken Pass/Fail. Courses should be selected in consultation with the Director of the Physical Education minor.

COURSES

PHED 1301 Concepts of Lifetime Fitness
An analysis of the basic components of physical fitness including scientific information pertinent to the development of individualized exercise programs. Course content addresses cardiovascular endurance, muscular endurance, strength, flexibility, and weight control.

PHED 1302 Outdoor Education
Theory of outdoor activities and participation in backpacking, canoeing, rock climbing, hiking, and cycling. Safety procedures will be addressed and practiced.

PHED 1303 Nutrition
Comprehensive study of dietary requirements, sources of various nutrients, and the relationship of food to health. The role of diet and exercise in relation to obesity, weight control, and degenerative disease.

PHED 1304 Prevention, Care and Rehabilitation of Athletic Injuries
Paramedical training for the recognition, prevention, and treatment of sport injuries. Includes preventive and rehabilitative exercise, emergency procedures, therapeutic modalities, and taping mechanics.

PHED 1306 Sports Officiating
The purpose of this class is to provide students a meaningful educational experience of both a practical and theoretical nature in the area of sports officiating.

PHED 1106 Sports Officiating Laboratory
This laboratory is designed to provide students an opportunity for practical implementation of the practices and skills learned in PHED 1306. This course cannot be taken concurrently with PHED 1306.
Prerequisite: PHED 1306.

PHED 1312 Sport in Society
A study of contemporary issues in sport and the impact sport has on society. Topics that will be critically analyzed include children and sport, sport and education, gender and racial issues, and deviance in sports.

PHED 1401 Modern Dance Theory, Technique and Composition
Beginning technique, principles of movement, and creative performance incorporating time, space, dynamics, body positions, and sensation. Theory of modern dance and the study of contributions of outstanding dance professionals.

PHED 2101 Apprentice Teaching
Provides the student with an opportunity to assist in teaching an activity course for one semester.
Prerequisite: Consent of instructor.
(Note: This course may be taken three times in different activities.)

PHED 3301 Exercise Prescription for Fitness
Theory of graded stress testing and development and implementation of individually prescribed exercise training programs.
Prerequisite: PHED 3304.

PHED 3302 Motor Learning
A study of the motor and cognitive characteristics involved in learning and performing motor skills.

PHED 3303 Dance for Children

Methods of teaching dance to children through movement experiences, locomotor and nonlocomotor skills, creative, folk, square, and aerobic dance. Opportunities are provided for observation of classes in local schools and studios.

PHED 3304 Physiology of Exercise
The effects of exercise and the adaptation of the body to physiological stress. Includes physiology of training and conditioning, metabolism and work capacity, the cardiovascular system during exercise and metabolism and weight control.

PHED 3305 Developmental Physical Education
A multidisciplinary approach to the motor development of children. Includes motor behavior and control, assessment, diagnosis, prescriptive programming, and teaching techniques for regular and special populations.

PHED 3306 Kinesiology
Functional application of the laws and principles of movement in sports performance and daily living. Includes material relevant to movement description, mechanics, force and leverage, translatory and rotary motion, strength measurement, and exercise analysis.

PHED 3307 Measurement and Evaluation in Physical Education
Analysis of tests and evaluative procedures used in secondary physical education with an emphasis on the test selection, methods of administration, and interpretation of results. Methods of improving grading practices in physical education are included.

PHED 3308 Sport Management
Studies the foundation and application of sport management as it applies to athletics, business, and physical education. Includes organizational theory, leadership, sport law, ethical concerns, budgeting, and marketing.

PHED 3309 Legal Issues in Sports
This course provides an understanding of the legal system, its terminology, and legal principles applied to professional and amateur sports. Emphasis is on identifying and analyzing legal issues affecting the sports environment, such as contracts, tort law, regulation of sports agents, labor management relations, civil rights legislation including Title IX, discrimination issues, and antitrust and arbitration decisions.

PHED 3310 Adapted and Developmental Physical Education
Adapted Physical Education develops beginning level knowledge and skills to meet individual needs in physical education, recreation, sport, fitness, and rehabilitation settings.

PHED 3311 Essentials of Strength Training and Conditioning
This course will focus on the basic principles underlying strength training and conditioning with particular emphasis on the physiological adaptations that take place in the body as a result of this training.

PHED 3312 Ethics in Sport Management
This course will focus on the exploration of contemporary values, issues, and controversies associated with sport and sport management. It is designed to provide students with a fundamental, theoretical, and practical knowledge of various ethical issues that may arise in sports. Students will become familiar with ethical decision-making methods and potential solutions to ethical issues they may encounter as sports professionals. Ethical concepts and issues will be examined through lectures, class discussions, presentations, and group assignments.

PHED 3-90 Directed Study in Physical Education
Independent study or research, or advanced selected topics in physical education that are not covered in other classes. Variations in credit according to the work performed, from 1 to 3 hours. Class may be repeated for a maximum of 6 credit hours, provided the topic varies.

PHED 4303 Research Methods
A study of the nature, purpose, and techniques of research. The standards and mechanics of preparing and reporting research.

ACTIVITY COURSES

PHED 1101 Aerobic Dance
The use of dance steps and combinations to achieve aerobic fitness. Flexibility and muscular endurance are also included.

PHED 1102 Aerobic Fitness
Evaluation, development, and implementation of a personal fitness program with emphasis on circulatory fitness.

PHED 1103 Weight Training
Resistive training principles and methods. Isometric, isotonic, and isokinetic procedures. Individual appraisal and practice.

PHED 1104 Weight Management and Exercise
A course designed to help each student understand the basic information relative to weight management and exercise. Based on an evaluation, each student will design and implement an exercise and nutrition program designed to lose weight.

PHED 1105 Rape Aggression Defense
A basic self-defense course for women that provides them with the information, tactics, and skills that they can use to protect them from aggressive acts that they may encounter.

PHED 1111 Swimming I
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 Swimming II
Advanced swimming techniques and endurance swimming.

PHED 1113 Life Guard Training
A course designed to teach the skills, techniques, and responsibilities of lifeguarding that fulfills the American Red Cross Lifeguard certification requirements.

PHED 1114 Water Polo
Fundamentals of the sport of water polo including dribbling, passing, shooting, defense, etc., will be emphasized. Participation will require intermediate to advanced swimming skills.

PHED 1121 Badminton
Fundamentals of badminton including overhead and underhand strokes, short and long serves, around the head strokes, and service returns. Rules and strategies for singles and doubles play.

PHED 1122 Fencing I
Fundamentals of foil fencing including the lunge, advance and retreat, balestra, offensive and defensive positions and strategies. Rules, officiating, and scoring.

PHED 1123 Fencing II
Review of foil fencing, advanced fencing techniques, and introduction of epee and saber.

PHED 1124 Golf I
Fundamentals of the grip, stance, swing, putting, and sand shots. Club selection, rules, scoring, and etiquette.

PHED 1125 Golf II
Review of fundamentals of golf. Participation at pitch and putt and local golf courses.

PHED 1126 Racquetball I
Basic skills of racquetball including the forehand, backhand, drive serve, lob serve, ceiling, sidewall, and backwall shots. Rules and strategies of singles and doubles play.

PHED 1127 Racquetball II
Advanced skill development and playing strategies.

PHED 1128 Tennis I
Fundamentals of tennis including forehand, backhand, volley, serve, and overhead. Rules and strategies for singles and doubles play.

PHED 1129 Tennis II
Review of the basic strokes in beginning tennis and the addition of dropshot, approach shot, spins, and serve variations. Singles and doubles strategies for the intermediate player.

PHED 1130 Tennis III
Skills, strategies, and drills for qualified students who wish to play at a competitive level. (Students 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.

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 Tae Bo
A course designed to teach students how to develop their level of aerobic fitness by participating in an intense aerobic workout, tone and strengthen their muscles, and learn valuable self-defense skills.

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 1137 Roller Skating
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 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, power, and agility where the emphasis is on Plyometrics and other high-intensity activities.

PHED 1141 Basketball
Fundamentals of basketball including passing, dribbling, shooting, and rebounding. Offensive and defensive drills, team play, rules, and strategies.

PHED 1142 **Soccer I**
Beginning fundamentals of soccer including soccer techniques, soccer tactics, soccer fitness, soccer psychology, rules, and history.

PHED 1143 **Soccer II**
Review of basic fundamentals and advanced play.

PHED 1144 **Volleyball I**
Power volleyball: the skills of the pass, serve, set, attack, block, and floor defense. Rules and strategies for team play.

PHED 1145 **Volleyball II**
Review of basic skills of volleyball. Introduction to advanced skills and strategies.

PHED 1151 **Ballet I**
History of ballet, basic technique, vocabulary, combinations, and style. Local concerts and critiques.

PHED 1152 **Ballet II**
Advanced ballet technique, center combinations, and variations. Comparison of major companies and performers.

PHED 1153 **Ballroom Dance I**
Basic steps and variations for the following dances: fox trot, waltz, swing, polka, rhumba, cha cha, samba, tango, mambo, and merengue. Rhythmical analysis, music recognition and techniques of leading and following.

PHED 1154 **Ballroom Dance II**
Review of ballroom dance, advanced techniques, and variations for American and Latin dances.

PHED 1155 **Country/Western Dance I**
Basic steps and variations for the following dances: cotton eyed joe, schottische, western two step, western waltz, Texas two step, Texas two step swing, western swing, western polka, put your little foot, and 10-step polka. Rhythmical analysis and techniques of leading and following.

PHED 1156 **Country/Western Dance II**
A continuation of Country/Western Dance I. Includes advanced variations and sequenced combinations.

PHED 1157 **Country/Western Dance III**
Performance level of country/western dance. Audition required.

PHED 1158 **Jazz**
Beginning elements of technique, vocabulary, and style. History of jazz, differing styles of technique, and study of performers who have influenced jazz.

PHED 1159 **Modern Dance I**
Beginning techniques and composition of modern dance.

PHYSICS AND ASTRONOMY

EUGENE E. CLARK, Ph.D., Professor
DAVID H. HOUGH, Ph.D., Professor; Chair
GORDON M. MacALPINE, Ph.D., Charles A. Zilker Distinguished Professor of Physics
DANIEL R. SPIEGEL, Ph.D., Professor
JENNIFER M. STEELE, Ph.D., Assistant Professor
DENNIS W. UGOLINI, Ph.D., Associate Professor

THE MAJOR

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

I. The common curriculum

II. Departmental requirements:

A. The major: 30 semester hours in Physics, including the following or equivalent courses: PHYS 1111, 1112, 1311 (or 1309), 1312 (or 1310), 2094 (four semesters), 2131, 2132, 3321, 3322, 3323, 3335, 4121 or 4131, and at least two of the following five courses: 3325, 3333, 4122, 4132, 4395.
B. Additional requirements: MATH 1311, 1312, 2321, 3336, CSCI 1320.
C. Completion of the Senior Experience: PHYS 4395 (Senior Project) as a Senior Capstone Course, or an approved Senior Experience in a second major.
D. Completion of Wagner Senior Assessment Exam in fall of the senior year.

III. Electives sufficient to total 124 hours.

The above are minimal requirements allowing students to supplement their programs with those courses best suited to fulfill their particular needs and to further their professional growth.

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

I. The common curriculum

II. Departmental requirements:

A. At least 38 semester hours in Physics, including the following or equivalent courses: PHYS 1111, 1112, 1311 (or 1309), 1312 (or 1310), 2094 (four semesters), 2131, 2132, 3321, 3322, 3323, 3325, 3333, 3335, 3336, 4121, 4122, 4131, 4132, 4395. (Honors students will take 3398, 4398, 4399 in place of 4395; these students are required to take 44 hours of Physics.)
B. MATH 1311, 1312, 2321, 3336, 3357, CSCI 1320.
C. Completion of the Senior Experience: PHYS 4395 (Senior Project) or PHYS 4398 (Honors Project) as a Senior Capstone Course.
D. Completion of Wagner Senior Assessment Exam in fall of the senior year.

III. Electives sufficient to total 124 hours.

The Bachelor of Science Program is designed to prepare students for graduate work in Physics. The above are minimal requirements allowing students to supplement their programs with those courses best suited to fulfill their particular needs and to further their professional growth.

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 PHYS 1111, 1112, 1311 (or 1309), 1312 (or 1310), 3323 with grades of C or better;
2. Completion of MATH 1311, 1312 with grades of C or better; and
3. A grade point average of at least 2.0 on all university work.

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

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

HONORS IN PHYSICS

A student in Physics may work toward Honors in Physics under the Bachelor of Science Degree program. The requirement for Honors in Physics is the successful completion of the Bachelor of Science program except that an honors student will take PHYS 3398, 4398, 4399 in place of 4395 and will be required to take a total of 44 hours of physics. During the junior year, a student who is eligible for honors will, after consultation with the chair of the Physics and Astronomy Department, enroll in 3398; part of the requirement of this course will be to prepare a thesis proposal. In the second semester of the junior year, an honors student will present a thesis proposal and credentials to the department faculty. Upon approval of the proposal, a student may enroll in PHYS 4398, 4399 during the senior year. By the end of the senior year, the thesis must be presented and defended before the Physics and Astronomy Department Faculty.

THE MINOR IN PHYSICS

A minor in Physics will consist of 18 semester hours of Physics. At least 9 semester 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 semester hours of the following Physics courses:

1305 (Stellar and Extragalactic Astronomy)
1103 (Observational Astronomy)
1311 (Introduction to Mechanics) or 1309 (General Physics I)
1312 (Introduction to Electricity, Magnetism and Waves) or 1310 (General Physics II)
3323 (Introduction to Modern Physics)
3350 (Astrophysics)

Plus three hours selected from the following:

3321 (Statistical Physics and Thermodynamics)
3322 (Classical Mechanics and Nonlinear Dynamics)
3325 (Optical Physics)
3348 (Atmospheric Physics)
3129 (Research Participation II)
3-90 (Directed Studies – Junior Level)
3-92 (Directed Studies for Secondary School Science Teachers – Junior Level)

The three additional hours can be any combination of 3129, 3-90 or 3-92 and 3129 and 3-9- may be repeated for additional credit with different content. The Chairperson of the Department of Physics and Astronomy must approve the selected content of 3129, 3-90 or 3-92 as relevant to the minor in astronomy.

COURSES

PHYS 1103 Observational Astronomy
A laboratory course to accompany either PHYS 1304 or 1305. Basic use of a telescope, including celestial coordinates and time systems. Visual observations of the Sun, Moon, planets and their satellites, stars, star clusters, nebulae, galaxies. Further possible topics include photometry, spectroscopy, electronic imaging. One field trip to a dark observing site may be required. May be taken only once for credit. Either PHYS 1304 or 1305 is a prerequisite or a corequisite.

PHYS 1106 Reproduction of Sound Laboratory
Laboratory to accompany PHYS 1306. Simple DC and AC electrical circuits and the principles and methods used in the electrical reproduction of sound. PHYS 1306 must be taken concurrently.

PHYS 1111 Introductory Physics Laboratory
Laboratory to accompany PHYS 1309 and 1311. Topics include: electrical circuits, computer assisted data-acquisition and data analysis, experiments in classical mechanics and thermodynamics.
Prerequisite: PHYS 1311 or 1309 must be taken concurrently.

PHYS 1112 Intermediate Physics Laboratory
Laboratory to accompany PHYS 1310, 1312. Topics include: transient circuits, AC circuits, instrumentation, geometrical optics, physical optics, spectra, radioactivity.
Prerequisites: PHYS 1111. PHYS 1310 or 1312 must be taken concurrently.

PHYS 1194 Physics and Society Seminar
Discussion of the historical, sociological, philosophical, and cultural context in which physics research is done and the implications of that research.
Prerequisite: PHYS 3323.

PHYS 1302 Frontiers of Physics
An introduction to the methods and results and philosophical implications of modern physics. Topics include: special and general relativity; the wave-particle theory of light and matter; atomic, nuclear, and particle physics; future explorations.

PHYS 1303 The Earth's Changing Environment
An introduction to the application of physics to understanding environmental processes. Topics include: force, energy, power, thermodynamics, energy transfer, environmental biophysics, the Greenhouse effect, the ozone layer, energy conservation, nuclear processes, and solar energy.

PHYS 1304 Solar System Astronomy
A survey of the nature of the solar system. Topics include: gravity, orbital motion of planets and moons, time and calendars, lunar and solar eclipses, the solar wind and planetary magnetospheres, planetary atmospheres and comparative planetary climatology, evolution of planetary surfaces, asteroids, comets, and meteors. May be taken without enrolling in PHYS 1103.

PHYS 1305 Stellar and Extragalactic Astronomy
A survey of the properties of stars and galaxies and of modern theories of cosmology. Topics include: distances, masses, sizes, motions, magnitudes and spectra of stars; stellar structure and evolution; pulsars and black holes; star clusters, nebulae, interstellar gas and dust; galactic structure; quasars, active galaxies, clusters of galaxies, large-scale structure in the universe; extragalactic distance scale, big bang theory, inflationary model, convergence of particle physics, and cosmology; the nature of light and astronomical instruments. PHYS 1304 is not a prerequisite for 1305. May be taken without enrolling in PHYS 1103.

PHYS 1306 Sound Waves and Light Waves
Wave phenomena with particular emphasis on sound waves and human hearing and on light waves and human vision. Topics include the nature of musical sounds, musical instruments, and musical scales; various optical phenomena such as reflection, refraction, color,

interference, polarization, optical instruments, lasers, and holography. Appropriate for the student not majoring in science.

PHYS 1307 Introduction to Nanotechnology
An introduction to current nanotechnology fabrication methods and applications aimed at nonscience majors. This course will explore how material properties change at the nanoscale and how these properties can be utilized in technological applications and consumer products. Topics include scientific concepts behind nanotechnology, microscopy at the nanoscale, medical applications, consumer applications, ethical concerns, and the environmental impact of nanotechnology.

PHYS 1309 General Physics I
A calculus-level introduction to classical mechanics and its applications. Topics include: particle kinematics, Newton's laws of motion, kinetic and potential energy, work, linear and angular momentum, torque, statics, simple harmonic motion, mechanical waves, sound, fluids, thermal physics, and applications in biology, medicine, and geology. This course is appropriate for biology, chemistry, and geosciences majors. Only one of PHYS 1309 or 1311 may be taken for credit.
Prerequisite: MATH 1311 or 1307 (either may be taken concurrently); PHYS 1111 is normally taken concurrently but is not required.

PHYS 1310 General Physics II
A calculus-level introduction to electric fields, magnetic fields, light waves, and modern physics. Topics include: electric fields, electric current, electric circuits, magnetic fields, electromagnetic induction, electromagnetic waves, geometrical optics, physical optics, quantum physics, atomic physics, lasers, nuclear physics and applications in biology, medicine, and geology. This course is appropriate for biology, chemistry, and geosciences majors. Only one of PHYS 1310 or 1312 may be taken for credit.
Prerequisite: PHYS 1309 or 1311; PHYS 1112 is normally taken concurrently but is not required.

PHYS 1311 Introduction to Mechanics
A calculus-level introduction to classical mechanics. Topics include: particle kinematics, Newton's laws of motion, kinetic and potential energy, linear and angular momentum, torque, statics, simple harmonic motion, mechanical waves, and sound. This course is appropriate for physics and engineering science majors. Only one of PHYS 1309 or 1311 may be taken for credit.
Prerequisite: MATH 1311 or 1307 (either may be taken concurrently). PHYS 1111 is normally taken concurrently but is not required.

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). PHYS 1112 is normally taken concurrently but is not required.

PHYS 2-90 Directed Studies - Sophomore Level
Individual research under faculty supervision or independent study under faculty supervision in fields not covered by other courses. Credit may vary from 1 to 3 hours. This course may be repeated for additional credit; however, no more than 3 total hours may be counted toward a major in physics.
Prerequisite: Consent of the Department Chair.

PHYS 2094 Physics Seminar
Attendance at departmental seminars. Grade is based on attendance.

PHYS 2128 Research Participation I
Individual research participation under faculty supervision.
Prerequisite: Consent of the Department Chair.

PHYS 2131 Sophomore Experimental Physics I
Rigorous experimental work, including data handling and scientific writing. Experiments drawn from mechanics, electricity and magnetism, optics, and nuclear physics. Meets 3 hours per week.
Prerequisites: PHYS 1111, 1112, 1312 (or 1310).

PHYS 2132 Sophomore Experimental Physics II
Continued instruction in experimentation, data analysis, and scientific writing. Experiments drawn from mechanics, electricity and magnetism, optics, and nuclear physics. Meets 3 hours per week.
Prerequisite: PHYS 2131.

PHYS 2311 An Introduction to Biophysics
A basic introduction to the application of physical principles to biological systems on nanometer-to-micrometer length scales. Questions addressed include: What are the forces that hold a cell together? How can a cell exert forces resulting in cell motion? What are the forces and energies involved in DNA functioning, protein folding, and nerve-signal transmission? How do the forces and energies at the molecular level ultimately generate the forces and energies required for macroscopic motion?
Prerequisites: (1) MATH 1307 or 1311; (2) ANY ONE of the following four courses: BIOL 1311, CHEM 1318, PHYS 1309, or PHYS 1311.

PHYS 3129 Research Participation II
Individual research participation under faculty supervision.
Prerequisites: PHYS 2128 and consent of the Department Chair.

PHYS 3312 Geophysics
Introduction to the use of physical principles and measurements in the study of the Earth. Topics include Fourier transforms, seismic waves in elastic media, exploration and earthquake seismology, gravity, magnetics, and heat flow. Computer modeling of geophysical processes and field work with geophysical instruments. Same as GEOS 3312. Field trips are required; field trip expenses must be paid by each student.
Prerequisite: PHYS 1310 or 1312 (may be taken concurrently).

PHYS 3321 Statistical Physics and Thermodynamics
An introduction to the subjects of statistical mechanics, kinetic theory, thermodynamics, and heat.
Prerequisites: PHYS 1310 or 1312, MATH 2321 (may be taken concurrently).

PHYS 3322 Classical Mechanics and Nonlinear Dynamics
Newtonian dynamics and kinematics utilizing the vector calculus. Topics include momentum, work and potential energy, angular momentum, rigid body dynamics, harmonic oscillators, central force motion, non-inertial systems, chaotic kinematics, and non-linear systems.
Prerequisites: PHYS 1312 (or 1310), MATH 2321 (may be taken concurrently).

PHYS 3323 Introduction to Modern Physics
A quantitative survey of modern physics. Topics include: special relativity, wave-particle duality, the Schroedinger equation, identical particles, solid state, and high energy physics.
Prerequisites: PHYS 1312 (or 1310), MATH 2321 (may be taken concurrently).

PHYS 3325 Optical Physics
The nature and propagation of electromagnetic waves and their interaction with matter. Topics from geometrical optics include reflection, refraction, mirrors, and lenses. Topics from physical optics include polarization, interference, and Fraunhofer and Fresnel diffraction.
Prerequisites: PHYS 1312 (or 1310) and MATH 1312.

PHYS 3333 Quantum Physics I
Introduction to the theory of quantum mechanics. Stationary states and time evolution of solutions to the Schroedinger equation. Observables, operators, and eigenvalues. The harmonic oscillator, angular momentum, central potentials, and perturbation theory.
Prerequisites: MATH 2321, PHYS 3323.

PHYS 3335 Electromagnetic Fields
An intermediate course on electromagnetic theory. Electrostatic field and potential, Gauss's law, conductors, electric dipoles and multipoles, solutions to Laplace's equation, method of images, dielectric media, electrostatic energy, electric current. Magnetic field of steady currents, including the law of Biot and Savart, Ampere's law, magnetic vector potential. Electromagnetic induction. Introduction to Maxwell's equations.
Prerequisites: PHYS 3322, MATH 3336 (may be taken concurrently).

PHYS 3336 Advanced Theoretical Physics
An advanced course on electromagnetic theory and classical mechanics. Magnetic materials, inductance, magnetic energy, transient and steady-state behavior in circuits with time-variable currents, full development of Maxwell's equations, propagation of electromagnetic waves, waves in bounded regions, radiation emission. Lagrangian and Hamiltonian dynamics, rigid body motion. Further possible topics include special relativity, plasma physics, fluid mechanics, and coupled oscillations.
Prerequisites: PHYS 3335, MATH 3336.

PHYS 3348 Atmospheric Physics
The physics of planetary atmospheres and the role of the atmosphere in determining climate. Topics include: global radiative equilibrium, radiative transfer, thermodynamic processes in the atmosphere, the general circulation, cloud formation, the ozone layer, instrumentation, and data bases.
Prerequisite: PHYS 1310 or 1312.

PHYS 3350 Astrophysics
The application of physics to understanding stars and systems of stars. Topics include: cosmic distance scale, gravitational dynamics, statistical mechanics, electromagnetic processes, quantum effects, stars, cosmic gas and dust, quasars, cosmology.
Prerequisite: PHYS 1310 or 1312.

PHYS 3-90 Directed Studies - Junior Level
Individual research under faculty supervision or independent study under faculty supervision in fields not covered by other courses. Credit may vary from 1 to 3 hours. This course may be repeated for additional credit; however, no more than 3 total hours may be counted toward a major in physics.
Prerequisite: Consent of the Department Chair.

PHYS 3-92 Directed Studies for Secondary School Science Teachers - Junior Level
Students work under supervision of a faculty member on a project that will be applicable to their future careers in teaching secondary school science. Oral and written communication of results are required. May be taken for 1 or 2 hours per semester with no more than 4 cumulative credit hours possible.
Prerequisites: Junior standing and completion of at least six science and mathematics courses and consent of instructor.

PHYS 3398 Honors Reading
Individual research and study under faculty supervision in preparation for Honors Thesis work.
Prerequisite: Consent of the Department Chair.

PHYS 4121 Photonics and Electronics Laboratory I
An introduction to the use of lasers, fiber optics, and semiconductor-based electronics in modern technology and physics research. Laboratory projects include digital and analog integrated circuits, electronic and optical-based signal processing and communication devices. Meets 3 hours per week.
Prerequisites: PHYS 2132, 3323 (may be taken concurrently), or consent of instructor.

PHYS 4122 Photonics and Electronics Laboratory II
Continued hands-on instruction in the use of lasers, fiber optics, and semiconductor-based electronics in modern technology and physics research. Laboratory projects include fiber-optic sensors and Michelson interferometry. Meets 3 hours per week.
Prerequisite: PHYS 4121.

PHYS 4131 Advanced Experimental Physics I
Experimental methods of modern physics. Topics include: atomic physics, radioactivity, interference, diffraction, and electronics.
Prerequisite: PHYS 2132, 3323 (may be taken concurrently), or consent of instructor.

PHYS 4132 Advanced Experimental Physics II
Advanced experimental techniques in modern physics. Rigorous analysis of experimental data and competent scientific writing form an

integral part of the course. Topics include: atomic physics, advanced optics, laser physics, transport phenomena, and reduced temperature measurements.
Prerequisite: PHYS 4131.

PHYS 4343 Quantum Physics II
A formal treatment of quantum mechanics emphasizing Dirac notation and matrix methods. Topics include: three dimensional systems, angular momentum, multi-particle systems, identical particles, spin perturbation theory, scattering, and an introduction to high-energy and particle physics.
Prerequisites: PHYS 3333, 3335.

PHYS 4346 Advanced Modern Physics
An advanced treatment of quantum theories of atoms and solids. Physics of solids and solutions, reciprocal lattices and crystallography, thermodynamic properties of condensed systems. Properties of atoms and photons. Laser cooling, coherent excitation, and atom optics.
Prerequisite: PHYS 3333.

PHYS 4-90 Directed Studies - Senior Level
Individual research under faculty supervision or independent study under faculty supervision in fields not covered by other courses. Credit may vary from 1 to 3 hours. This course may be repeated for additional credit; however, no more than 3 total hours may be counted toward a major in physics.
Prerequisite: Consent of the Department Chair.

PHYS 4395 Senior Project
Individual research and scholarly investigation under faculty supervision. Presentation of results at a department seminar is required. This course satisfies the Senior Experience requirement of the University's Common Curriculum. Required of all B.S. Physics majors.
Prerequisite: Senior standing.

PHYS 4396 Senior Thesis
Continuation of PHYS 4395 including written preparation of a thesis and oral presentation of results at a department seminar. Not required of but highly recommended for B.S. Physics majors.
Prerequisite: PHYS 4395.

PHYS 4398 Honors Project
Individual research and scholarly investigation under faculty supervision. Presentation of results at a department seminar is required. Required for honors in physics.
Prerequisite: PHYS 3398.

PHYS 4399 Honors Thesis
Continuation of PHYS 4398 including written preparation of a thesis and oral presentation of results at a department seminar. Required for honors in physics.
Prerequisite: PHYS 4398.

POLITICAL SCIENCE

DAVID A. CROCKETT, Ph.D., Associate Professor
L. TUCKER GIBSON, Ph.D., Professor
JOHN R. HERMANN, Ph.D., Associate Professor
KATSUO NISHIKAWA, Ph.D., Assistant Professor
PETER O'BRIEN, Ph.D., Professor
SUSSAN SIAVOSHI, Ph.D., Professor; Chair
MARY ANN TÉTREAULT, Ph.D., Una Chapman Cox Distinguished Professor of International Affairs
HYON JOO YOO, Ph.D., Assistant Professor

THE MAJOR

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

I. The common curriculum

II. Departmental requirements:

A. Lower division requirements: 9 hours

One course from three of the following fields:

1. American Politics (PLSI 1301, 1303)
2. Comparative Politics (PLSI 1331, 1332)
3. International Politics (PLSI 1341)
4. Political Theory (PLSI 1361)

B. Political Science majors may choose among five separate curricula.

1. General Political Science

Students who have a general interest in Political Science may choose to major in the discipline without selecting a concentration. Majors who choose this option must meet the following requirements:

a. Satisfaction of the lower division requirement (9 hours).
b. Distribution of courses in five subfields: The student is required to take at least one course in each of the discipline's five major fields (American Politics, Comparative Politics, International Politics, Public Law, and Political Theory. Judicial Process can be used to satisfy the Public Law requirement). Lower division courses may be used to satisfy this distribution requirement.
c. Eight upper division courses (24 hours).

2. Comparative/International Politics

This concentration is designed for majors who have a primary interest in international relations and/or comparative politics. In addition to preparing students for graduate work in these subfields of the discipline or related disciplines, this concentration is designed for students interested in international affairs.

a. Satisfaction of the lower division requirement (9 hours).
b. One upper division course in American Politics or Public Law (3 hours).
c. One upper division course in Political Theory (3 hours).
d. Five upper division courses in International Politics or Comparative Politics (15 hours).
e. One course from the following disciplines outside the Department of Political Science (3 hours):
Modern Languages and Literatures: ML&L 3301 and higher. Economics: ECON 2318 (Global Economy) or 3327 (Comparative Economic Systems).
History: Any upper division course with a focus on Latin American, sub-Saharan Africa, East Asia, the Middle East, or Europe (to be approved by the advisor).

3. American Politics

This concentration is designed for students who anticipate graduate studies in American politics or related fields. This concentration is also designed for students interested in political campaigns or public affairs.

a. Lower division requirements (9 hours).
b. Distribution of courses in five subfields:
The student is required to take at least one course in each of the discipline's five major fields (American Politics, Comparative Politics, International Politics, Public Law, and Political Theory. Judicial Process can be used to satisfy the Public Law requirement). Lower division courses may be used to satisfy this distribution requirement.
c. Seven upper division courses in American Politics and/or Constitutional Law (21 hours).
d. ECON 1311, 1312 (6 hours).
e. Research Methods in Political Science (PLSI 3372) or a research methods course offered by another department that is approved by the advisor (3 hours).

4. American Politics and Law

This concentration is designed for students who plan to attend law school. In addition to courses in political science, this concentration requires students to take courses that are designed to help develop analytical skills required for legal studies.

a. Lower division requirements (9 hours).
b. Distribution of courses in five subfields:
The student is required to take at least one course in each of the discipline's five major fields (American Politics, Comparative Politics, International Politics, Public Law, and Political Theory. Judicial Process can be used to satisfy the Public Law requirement). Lower division courses may be used to satisfy this distribution requirement.
c. Seven upper division courses in American Politics/Constitutional Law (21 hours).
d. ECON 1311, 1312 (6 hours).
e. One course, approved by the advisor, in each of the following areas (6 hours):
1. Logic, writing, or speech communication
ENGL 3315 Advanced Writing for the Professions
PHIL 1341 Introduction to Logic
PHIL 2340 Symbolic Logic I
SPCH 1333 Public Speaking
SPCH 3330 Argumentation
SPCH 3334 Persuasion
2. A course that views the law from a perspective other than that of Political Science
BUSN 3302 Legal Concepts of Business I
BUSN 3341 Legal Concepts of Business II
BUSN 3361 International Business Law
COMM 3362 Media Law and Policy
ECON 3339 Economic Analysis of Law
PHIL 3353 Philosophy of Law
SOCI 3350 Sociology of Law

5. **American Public Policy**

This concentration is designed for students who are interested in public policy and policy analysis.

a. Lower division requirements (9 hours).
b. Distribution of courses in five subfields:
The student is required to take at least one course in each of the discipline's five major fields (American Politics, Comparative Politics, International Politics, Public Law, and Political Theory. Judicial Process can be used to satisfy the Public Law requirement). Lower division courses may be used to satisfy this distribution requirement.
c. Seven upper division courses in American Politics to include the following: Policy Analysis and the Policymaking Process, the Federal System, Bureaucratic Politics (21 hours).
d. Research Methods in Political Science (PLSI 3372) or a research methods course offered by another department that is approved by the advisor (3 hours).
e. ECON 1311, 1312 (6 hours).
f. Two courses that examine policy making and implementation from the perspective of another discipline (6 hours):
ECON 3323 The Economics of Government
ECON 3330 Economics and the Environment
ECON 3334 Urban Economics
ECON 3336 Antitrust Economics
ECON 3338 Government Regulation of Business
SOCI 3324 Crime and Delinquency
SOCI 3339 The Welfare State

III. Completion of Senior Experience
All majors must complete a course that satisfies the requirement for the Senior Experience. Options that are available to majors include:
PLSI 4390 (Senior Seminar in Political Science).
An approved Senior Experience course in a second major.
GNED 4300 (Senior Interdisciplinary Seminar).
GNED 4301 (Senior Synthesis).

IV. Electives sufficient to total 124 semester hours.

GUIDELINES FOR ACCEPTANCE OF MAJORS

1. Completion of two lower division courses with grades of C or better.
2. An overall grade point average of at least 2.0.

THE MINOR

The requirements for the Minor:

A minimum of 18 semester hours of political science. Six hours shall be lower division; the remaining 12 shall be upper division. All courses shall be selected under the supervision of a departmental advisor.

INTERNSHIPS

The department encourages majors and minors to actively pursue internship opportunities that are available locally or through a variety of study abroad or Washington, DC programs. Students are encouraged to pursue such opportunities with or without credit. PLSI 3-97 (Internship in Politics, Administration, and Law) can only be taken Pass/Fail.

COURSES FOR TEACHER CERTIFICATION

The American national government and the Texas government requirements can be met most efficiently through taking PLSI 1303. The American national government requirement alone can be met through PLSI 1301.

COURSES

LOWER DIVISION

PLSI 1301 American Politics
A study of the institutions and processes of American government, with an emphasis on how changing social and economic conditions impact on contemporary structures and functions. This is the basic introductory course in American government. A student may receive credit for only one of the following: 1301 or 1303.

PLSI 1303 Introduction to American National and Texas Government
An introductory course in American national and Texas governments with an emphasis on constitutional development, federalism, the executive, legislative and judicial branches of government, political behavior, interest groups, the mass media, and local government. (Satisfies Texas Law for teacher's certificate.) A student may receive credit for only one of the following: PLSI 1301 or 1303.

PLSI 1331 Comparing Countries
An introduction to the ideologies, governments, and politics of the world's countries, focusing on the industrialized democracies, the transitional or Communist countries, and the poor countries of the Third World.

PLSI 1332 Film, Literature, and Politics of the Third World
An examination of political issues and challenges facing Third World societies as expressed through literature and film. Relying primarily on the works of Third World artists and writers, the course will explore issues such as the status of women, poverty, the plight of ethnic minorities, and the legacy of colonialism.

PLSI 1341 The Individual in World Politics
An introduction to world politics. How the distribution of power and resources is used by governing elites, technical experts, business and financial agents, social activists, and citizens to shape and operate the several intersecting physical and social systems that constitute the modern world.

PLSI 1361 Thinking About Politics
An introduction to some of the important moral issues persons confront as citizens of a given polity, for instance: 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 political situation.

UPPER DIVISION

Unless otherwise stated the student shall be expected to have completed six hours of Political Science before enrolling in an upper division course. With permission of the instructor, students can be admitted with only three hours.

AMERICAN POLITICS

PLSI 3301 Political Parties and Interest Groups
An analysis of the development, structure, functions, and activities of political parties and interest groups in the American political system. In addition to an analysis of the interaction of these institutions, attention is given to the role of parties and interest groups in organizing mass political behavior in the electoral and policy-making processes.
Prerequisites: PLSI 1301 or 1303 or consent of instructor.

PLSI 3303 Elections and Campaigns
A study of the recruitment, nomination, and election of public officials in the United States with an emphasis on election theory, the legal framework of elections, campaign strategy and tactics, voting behavior, political advertising, and campaign finance.
Prerequisites: PLSI 1301 or 1303 or consent of instructor.

PLSI 3304 Political Communication
Studies communication aspects of the political processes in a democratic society with an emphasis on contemporary political campaigns; presidential and congressional rhetoric; and less public forms of communication in the policy-making process. (Also listed as SPCH 4350.)

PLSI 3305 Legislatures in the United States
An analysis of American legislative institutions with an emphasis on the theories of representation, the development of legislative institutions, the structure and organization of legislatures, legislative parties, legislative behavior, executive-legislative relationships, and interest groups.
Prerequisites: PLSI 1301 or 1303 or consent of instructor.

PLSI 3306 The American Presidency
An examination of the Presidency including recruitment, powers, and responsibilities and its relationship to the other major agencies of state.
Prerequisites: PLSI 1301 or 1303 or consent of instructor.

PLSI 3313 Policy Analysis and the Policymaking Process
An examination of the basic approaches and models used by policy analysts to explain governmental decision-making and public policy. Course selects contemporary public policy issues to demonstrate the utility of specific approaches including: process theories, group theory, public choice theory, incrementalism, and game theory.
Prerequisite: PLSI 1301 or 1303.

PLSI 3314 Bureaucratic Politics
An examination of public bureaucrats and bureaucracy in the national political environment, with an emphasis on the interests and activities of public employees, the role of experts, and the issues of accountability and responsibility.

Prerequisites: PLSI 1301 or 1303 or consent of instructor.

PLSI 3316 Comparative Urban Governance
Cross-national analyses of the evolution of current functions and structures of city governments; bureaucratic power and other contemporary issues in urban governance; political parties and associations, interest groups, and citizen participation in urban politics; business and third sector involvement in urban governance; and recurring patterns in the political policy outputs of major institutions involved in urban governance. (Also listed as URBS 3336.)
Prerequisites: PLSI 1301 or 1303 or consent of instructor.

PLSI 3329 Special Topics in American Politics
Occasionally courses will be offered on such special topics as Religion and Politics and Presidential Elections. 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.

COMPARATIVE POLITICS

PLSI 3330 European Politics
A study of the successes and failures, strengths, and weaknesses of parliamentary democracy in various European countries.
Prerequisites: PLSI 1331 and another three-hour lower division course in Political Science, or consent of instructor.

PLSI 3331 Political Economy of the U.S., Europe and Japan
A comparative study of the relationship between the public and private sectors in the three regions with special emphasis on the extent to which government intervenes in the economy.
Prerequisite: ECON 1312 or consent of instructor.

PLSI 3333 Latin American Politics
An interdisciplinary survey of government and politics in Latin America, focusing on democratization, authoritarianism, and revolution in several major countries.

PLSI 3334 State, Society and Change in the Middle East
A comparison of major Middle Eastern political systems, emphasizing the socio-economic and cultural characteristics of selected countries.
Prerequisite: HIST 1351 or consent of instructor.

PLSI 3339 Special Topics in Comparative Politics
Occasionally courses will be offered on such special topics as The European Community. 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.

INTERNATIONAL POLITICS

PLSI 3341 Nationalism and Ethnicity in World Politics
An examination of the politics of nationalism and ethnicity in one or more world regions including countries in the Third World.
Prerequisites: Either PLSI 1341 or 1331 or 1332, or consent of the instruction.

PLSI 3342 International Law
An introductory survey of public international law as practiced by states and international organizations, with an emphasis on jurisdiction, treaties, territory, law of the sea, human rights, economy, wars, and disputes as well as other topics.
Prerequisite: PLSI 1341 or consent of instructor.

PLSI 3443 Violent Conflict in International Politics
Explores the nature, genesis, development, conclusion, and impacts of violent conflict through a detailed examination of a single war or a set of similar and/or related conflicts that, individually or together, had a significant impact on world politics. Students may take this course more than once provided the topics vary.
Prerequisite: PLSI 1341.

PLSI 3344 The Middle East and the World
An examination of international relations and major foreign policy issues among the nations of the Middle East and between these nations and the rest of the world.
Prerequisite: PLSI 1341 or 1331 or 1332, or HIST 3350 or 3354.

PLSI 3345 The United States and World Order
An examination of US foreign policy and actions in a globalizing world.
Prerequisite: PLSI 1341 or 3313 or consent of instructor.

PLSI 3346 Geography and World Politics
An interdisciplinary examination of the geographical basis of world politics, stressing the territorial state, contemporary challenges to the state, and “geographic literacy.”
Prerequisite: PLSI 1341 or consent of instructor.

PLSI 3347 Gender and International Relations
This course looks at the impact of gender on the construction of theories of international relations and the conduct of foreign policies.
Prerequisite: PLSI 1341 or WAGS 2310.

PLSI 3348 The Politics of Development
This course examines development as a historical process affecting politics, culture, economics, and society. It looks at early as well as middle and late developers, and explores reasons for different developmental trajectories.
Prerequisites: PLSI 1341, 1332, or 1331.

PLSI 3349 Special Topics in International Politics
Occasionally courses will be offered on special topics. Students are encouraged to bring to the attention of the Department Chair topics they wish to have offered. Students may take this course more than once provided the topics vary.

PLSI 4341 **International Political Economy**
An examination of the development and operation of the modern international political economy, with an emphasis on the politics of international investment, finance, trade, and aid.
Prerequisite: PLSI 1341 or ECON 3340 or 3346 or 3347.

PUBLIC LAW

PLSI 3351 **Constitutional Law**
Case law analysis and examination of the U.S. Supreme Court's role in defining the evolving nature and scope of national judicial, executive, and legislative authority. Topics addressed include the nature of judicial review, separation of powers and foreign policy authority, and the nature of federal and state commerce and taxation power. Additional emphasis on the development of basic legal research skills.

PLSI 3352 **Civil Rights and Liberties**
Case law analysis and examination of the U.S. Supreme Court's role in defining the meaning of the Bill of Rights as a limitation upon both state and federal power. Topics addressed include discrimination law, freedom of speech and religion, and criminal due process. Additional emphasis upon the development of basic legal research skills.

PLSI 3353 **Freedom of Speech**
An examination, primarily through the use of decisions of the U.S. Supreme Court, of the nature and extent of the constitutional guarantee of "freedom of speech" and, more broadly, "freedom of expression," including both verbal and symbolic speech and the role of the "press" in reporting and transmitting it. (Also listed as SPCH 3340.)

PLSI 3354 **Judicial Process**
Judicial Process examines the functions and roles of courts in the American political and legal universe. Additionally, the legal profession, group litigation strategies, methods of judicial selection, theories of judicial decision-making, judicial philosophy, judicial implementation, and alternative forms of dispute resolution are surveyed.

PLSI 3355 **Criminal Justice**
Criminal Justice explores the behavior, institutions, and processes of the criminal justice system. We discuss and research many of the timely and controversial issues regarding criminal justice policy. In particular, we examine if extant criminal justice policies are successful in reducing crime rates. Special emphasis is placed on developing critical reasoning, oratory, research, and writing skills.

PLSI 3359 **Special Topics in Public Law**
Occasionally courses will be offered on special topics. Students are encouraged to bring to the attention of the Department Chair topics they wish to have offered. Students may take this course more than once provided the topics vary.

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, Thucydides, Plato, Aristotle, Augustine, and Machiavelli.

PLSI 3362 **Modern Political Thought**
What are the enduring questions of modern politics? An examination of freedom, authority, and democracy through the writings of the great political thinkers of the modern age. Hobbes, Locke, Rousseau, Burke, Marx, Mill, and de Tocqueville.
Prerequisite: Junior or Senior standing or consent of instructor.

PLSI 3363 **Masters of Suspicion: Contemporary Political Thought**
A study of many of the sharpest thinkers in the 20th century 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.
Prerequisite: Junior or Senior standing.

PLSI 3369 **Special Topics in Political Theory**
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.

SPECIAL COURSES

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 3-97 **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.

PLSI 3372 **Research Methods in Political Science**
An introduction to basic research techniques used in contemporary political science with emphasis on research design, data collection and analysis, and the use of the computer in analyzing data. Attention will be given to survey research and survey data, election data, census data, government data and statistics, and budget data.

PLSI 4390 **Senior Seminar in Political Science**
An in-depth study of selected themes in the discipline of political science. Second-semester juniors who are studying off-campus in the first semester of their senior year may enroll in this course with the consent of the instructor. Consent of the instructor is required for non-majors. This course satisfies the Senior Experience requirement of the University's Common Curriculum.

PSYCHOLOGY

CAROLYN B. BECKER, Ph.D., Associate Professor
JANE B. CHILDERS, Ph.D., Associate Professor
PAULA T. HERTEL, Ph.D., Professor
KEVIN P. McINTYRE, Ph.D., Assistant Professor
GLENN E. MEYER, Ph.D., Professor
KIMBERLEY A. PHILLIPS, Ph.D., Associate Professor
HARRY M. WALLACE, Ph.D., Associate Professor
CHARLES B. WHITE, Ph.D., Professor; Vice President for Information Resources and Administrative Affairs
CAROL Y. YODER, Ph.D., Professor; Chair

THE MAJOR

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.

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

I. The common curriculum

II. Departmental requirements: 38 hours in psychology, including:

A. PSYC 1300 (with a minimum grade of C).
B. PSYC 2401 (with a minimum grade of C) and 2402.
C. One course in each of the following clusters:
1. Basic physiological and perceptual processes: 2310, 2312, 3311.
2. Development: 2320, 3321, 3322.
3. Cognition: 2330, 3331, 3333.
4. Social and Individual Differences: 2341, 3340, 3342.
D. Completion of Senior Experience: PSYC 4390, PSYC 4396, or GNED 4300.
E. Electives sufficient to total 38 hours in psychology (other cluster courses, companion courses, and individual experiences).

III. Electives sufficient to total 124 semester 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 semester hours. At least nine of these hours must be at the upper-division level.

HONORS IN PSYCHOLOGY

To be eligible for graduation with Honors in Psychology, 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 psychology courses of at least 3.50 and “A” in PSYC 4395, 4396 (Thesis I and II).

To apply for graduation with Honors in Psychology, students should address a written request for consideration to the chair of the department. 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 in the department and will be based on the quality of the written thesis and its oral presentation in a departmental colloquium.

COURSES

INTRODUCTION AND METHODS

PSYC 1300 Principles of Psychology
An introduction to the major domains of psychological knowledge, informed by biological, cognitive, environmental, and motivational perspectives. Emphasizes scientific theory and methods supplemented by applications to everyday experience.

PSYC 2401 Statistics and Methods I
Instruction in measurement processes, descriptive statistics, correlational and inferential reasoning and basic statistical procedures. Students become acquainted with major procedures and issues involved in the framing of psychological research. Instruction includes the use of computer-implemented statistical packages and the method and style of writing about psychological research.

PSYC 2402 Statistics and Methods II

Instruction in additional techniques in inferential reasoning, including analysis of variance and major nonparametric statistics. All topics are presented within the context of research design and methodology. Related statistical packages for computer-assisted analysis and further instruction in writing are included.
Prerequisite: PSYC 2401 or consent of instructor.

CLUSTER 1: BASIC PHYSIOLOGICAL AND PERCEPTUAL PROCESSES

PSYC 2310 Introduction to Neuroscience
A survey of basic neuroscience, starting with fundamentals of neuronal structures and ending with higher brain functions and their relations to mind and behavior. (Also listed as NEUR 2310.)

PSYC 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-science majors and science majors. Spring semester only. (Also listed as NEUR 2110.)
Prerequisite or corequisite: PSYC/NEUR 2310.

PSYC 2312 Principles of Learning
Major principles of learning, derived from empirical research with a variety of organisms. Historically important and contemporary theories of learning are introduced. Topics also include applications to child rearing, education, and
psychotherapy, and implications for issues concerning freedom and responsibility.
Prerequisite: PSYC 1300.

PSYC 3311 Sensation and Perception
Study of sensory and perceptual systems. Emphasis is on the relationship of neurophysiological and cognitive principles. Major focus is on vision (visual neurophysiology, spatial vision, form, color, depth and motion) with some discussion of psychophysical methods, audition, speech perception and the chemical senses. Demonstrations and conducting experiments are part of course.
Prerequisites: PSYC 1300, 2401.

CLUSTER 2: DEVELOPMENT

PSYC 2320 Lifespan Development
Overview of contemporary theoretical and empirical approaches to lifespan development. Biological, social, and psychological dimensions of behavior will be examined from conception and infancy through late life.

PSYC 3321 Cognitive Development
Examination of contemporary theoretical and empirical approaches to cognitive development from birth through adolescence. Major areas of cognition (e.g., perception, categorization, memory, language) are studied from a developmental perspective.
Prerequisite: PSYC 1300.

PSYC 3322 Social Development
Investigation of social development from infancy through adolescence. The course focuses on topics including infant attachment, gender development, the understanding of race/ethnicity, the development of morality, and the influence of peers, parents, and the media on social development.
Prerequisite: PSYC 1300.

CLUSTER 3: COGNITION

PSYC 2330 Fundamentals of Cognition
An introduction to the principles of cognitive psychology. Topics include the development of the cognitive paradigm, attention, higher order processes in perception, language, memory, problem-solving, and human-computer interaction. Application to other domains in Psychology and disciplines will be discussed.

PSYC 3331 Memory and Cognition
Examination of the fundamental principles of memory and thought, the experimental evidence to support these principles, and the theoretical perspectives used to understand them.
Prerequisites: PSYC 1300 and 2402 or consent of instructor.

PSYC 3333 Simulation of Neural and Cognitive Processes
The interrelations among the study of the mind, the elaboration of brain mechanism, and studies in artificial intelligence. Discussion of modern computers as a model of brain functioning with emphasis on the question of parallel versus serial processing and contemporary approaches to information processing in the nervous system. Students will gain experience in modeling these processes on computers.
Prerequisites: PSYC 1300 or 2330.

CLUSTER 4: SOCIAL AND INDIVIDUAL DIFFERENCES

PSYC 2341 Social Psychology
Examination of how individuals think, feel, and behave in different social contexts. Explores basic and applied research on topics such as aggression, attitudes, attribution, prejudice, relationships, self-perception, and social influence.
Prerequisite: PSYC 1300.

PSYC 3340 Psychopathology
Examination of current theory and research findings concerning major psychological disorders. Causes, treatment, and phenomenology of psychopathology are explored, with emphasis on relevant social, intrapsychic, and physiological factors. Includes a critique of approaches to differentiating pathological and adaptive behavior.
Prerequisite: PSYC 1300.

PSYC 3342 Personality and Individual Differences
Examination of the following perspectives on personality process: psychoanalytic, trait, genetic, behavioral, cognitive, and humanistic. Major research methods and issues of each perspective are stressed.
Prerequisites: PSYC 1300 and 2401.

COMPANION COURSES

PSYC 2323 Psychology of Gender
Biological, social, and cultural contributions to gender role development. Specific topics to be discussed will include psychological theories of gender role development (biological and social), gender differences in cognition, models of gender differences, masculinity and femininity, representation of masculinity and femininity in literature and the media, gender based sexuality, peer relationships, and gender based development of identity and self.

PSYC 3338 Comparative Psychology
An examination of the theories used to interpret animal behaviors such as communication, territoriality, and aggression. Research and observation pertinent to differences among these major theories are stressed.
Prerequisite: PSYC 1300.

PSYC 3351 Clinical Psychology
Exploration of the field of clinical psychology, with a focus on theories and practices of intervention. The major approaches to intervention, including psychodynamic, behavioral, cognitive, humanistic, and systems, are examined. These approaches are critically evaluated with attention to relevant research issues.
Prerequisites: PSYC 1300 and 3340.

PSYC 3353 Psychological Assessment
The history, principles, purposes, and problems of psychological assessment. Recent interest in gender, age, and cultural differences is integrated with the examination of major assessment techniques.
Prerequisites: PSYC 1300 and 2401.

PSYC 3355 Behavioral Medicine
Examination of the basic psychological processes that influence health and illness. Specific behaviors, illnesses, and physical conditions such as smoking, obesity, cancer, HIV, and hypertension are explored with a focus on theoretical models and psychological interventions.
Prerequisite: PSYC 3340 or consent of instructor.

PSYC 3360 Special Topics in Psychology
In depth study of theory and research within a particular domain of psychology. May be repeated on different topics.
Prerequisite: Consent of instructor.

PSYC 4370 History and Systems
Survey of the scientific and philosophical concepts that served as the precursors to contemporary psychology. Emphasis on the historical development of psychological theories in America.
Prerequisite: Senior status.

PSYC 4390 Senior Seminar in Psychology
In-depth study of theory and research on a topic that spans subdisciplines within psychology or relates psychology to cross-disciplinary interests.
Prerequisite: Senior status with a major in psychology or consent of instructor.

INDIVIDUAL EXPERIENCE

PSYC 3357 Directed Field Practicum
Field work conducted as part of the academic curriculum. May be repeated once for credit on a different topic. Pass/Fail basis only (does not count toward the major).
Prerequisites: PSYC 3340 and consent of instructor.

PSYC 3-61 Reading and Research
Independent study under supervision; three hours per week per credit is assumed, on average; credit may be for one or two semester hours. May be repeated twice.
Prerequisite: Consent of instructor.

PSYC 3368 Supervised Research
Independent research using empirical methods. May be repeated once. Nine hours per week will be distributed across research activities, colloquia attendance, and student presentations.
Prerequisite: PSYC 2401.

PSYC 4395 Thesis I
Independent research and scholarly investigation conducted with faculty supervision and culminating (with PSYC 4396) in the preparation of a written thesis.
Prerequisites: PSYC 2401, 2402, and consent of instructor.

PSYC 4396 Thesis II
Completion of research initiated in PSYC 4395 and the presentation of the written thesis according to departmental guidelines.
Prerequisites: PSYC 4395 and consent of instructor.

RELIGION

C. MACKENZIE BROWN, Ph.D., Jennie Farris Railey King Professor of Religion
RUBÉN R. DUPERTUIS, Ph.D., Assistant Professor
RUQAYYA Y. KHAN, Ph.D. Associate Professor
RANDALL L. NADEAU, Ph.D., Professor; Chair
SARAH K. PINNOCK, Ph.D., Associate Professor
CHAD SPIGEL, Ph.D., Assistant Professor
ANGELA TARÁNGO, Ph.D.*, Assistant Professor

THE MAJOR

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

I. The common curriculum

II. Departmental requirements:

A. 30 semester hours in religion including:
1. At least one of the following: RELI 3341, 3342, 3343;
2. At least one of the following: RELI 3331, 3332, 3333, 3334;
3. RELI 4394.

B. At least 15 of the semester hours in religion to be upper-division courses selected in consultation with a faculty advisor in the Department of Religion.

C. A total of no more than 12 semester hours from RELI 3-90 and 3-91 to be counted toward the major without approval of the advisor and the Department.

D. Completion of the Senior Experience: RELI 4394 or the Senior Interdisciplinary Seminar (GNED 4300).

III. Electives sufficient to total 124 semester hours.

THE MINOR

The requirements for a minor in religion are as follows:

I. 18 semester hours in religion.

II. At least 9 of the semester hours in religion to be upper-division courses selected in consultation with a faculty advisor in the Department of Religion.

III. A total of no more than 6 semester hours from RELI 3-90 and 3-91 to be counted toward the minor without approval of the advisor and the Department.

COURSES

LOWER DIVISION COURSES AT THE 1000 LEVEL

Lower division courses at the 1000-level carry no prerequisites.

RELI 1310 Contemporary Religious Thought
An examination of philosophical, theological, literary, and cinematic approaches to spirituality, gender, suffering, and transcendence in contemporary religious thought from among Jewish, Christian, Islamic, Buddhist, humanist, and other traditions.

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 Islam, Judaism, and Christianity
A comparative study of the three interrelated Abrahamic religions. Attention to such topics as founders, scriptures, worship and ritual, mysticism, material culture, identity and gender roles.

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

Lower division courses at the 2000-level carry no prerequisites but presuppose of the student either (a) a particular interest in the subject matter of the course, (b) a certain familiarity with the specific subject matter of the course, or (c) a certain familiarity with Religion as an academic discipline.

RELI 2318 Religion and the Civil Rights Movement
The Civil Rights Movement remains one of the most compelling and influential movements in U.S. history. This course examines the significant role of religion in framing the African American, Native American, and Latino community efforts to seek substantive social and economic change. We also explore the role of religion in structuring the various responses from majority populations. Finally, we study how the movement influenced modern theologies. Some attention may also focus on the role of religion on the feminist, anti-war, and gay rights movements.

RELI 2354 The Hebrew Bible/Old Testament
A study of the books of the Old Testament/Hebrew Scriptures in English translation. Some of the books will be read in their entirety, and substantial excerpts of most of the others will also be read so that all of the major types of literature present in the Old Testament/Hebrew Scriptures will be represented. The course will approach its subject matter primarily as literature, but attention will be given to the historical, cultural, and religious aspects of its production. The course will also consider the trajectory of its subject matter in Jewish and Christian thought, and in Western Culture.

RELI 2355 The New Testament
A study of the writings that comprise the New Testament, with attention also to certain other early Christian documents not included in the New Testament. Most of the writings are read in their entirety, and they are examined with reference to their historical, cultural, religious, and literary contexts; their use as historical sources for the reconstruction of Christian origins; their role as a basis for Christian belief and practice; and their wider influence in Western and world cultures.

RELI 2356 The Qur'an
Islam and Muslims have been embroiled in some of the most searing controversies of our age, and the Islamic scripture, the Qur'an, has been at the center of a number of these controversies. This course introduces students to the Qur'an, and how it is perceived by Muslims themselves. RELI 2356 deals with the importance of this sacred text for the religion of Islam, including its beliefs, rituals, and rites. The course also covers the history of the Qur'an and engages with key themes of the scripture. Students will be introduced to the content of the primary text and a selection of accessible secondary readings. Current hot-button questions such as "What does the Qur'an say about women?" or "Does the Qur'an legitimate violence?" will also be addressed.

UPPER DIVISION COURSES AT THE 3000 LEVEL

Upper division courses may have prerequisites. In some cases, the prerequisite may be waived by consent of instructor.

RELI 3301 Gender and Religion
An examination and discussion of issues relevant to the study of religion and ethics raised by contemporary feminists; offered from the perspective of gender and religion; the roles played by religious traditions in relation to cultural expectations placed upon women and men; implicit and explicit values reflected in religious traditions regarding women; and the diversity of women's responses to cultural expectations in a religious context.
Prerequisite: 1 course in Religion.

RELI 3303 Death and Beyond
A comparative study of the perspectives and attitudes within various world religious traditions regarding the significance of death for human existence and self-understanding; attention to contemporary accounts of near-death experiences, compared to traditional religious accounts of other-world journeys; special emphasis on the concepts of heaven, hell, reincarnation, universal salvation, and divine justice, and the relation of such notions to moral, philosophical, and theological ideals pertaining to life.
Prerequisite: 1 course in Religion.

RELI 3312 Religion and Science in the West
An examination and discussion of issues in the history of the relation of religion and science in the Western world, with emphasis on developments from the Renaissance to the present. The course focuses on significant religion-science debates, such as those surrounding evolution and the mind/soul/body relation, and on methods and models in religion and science. Attention will be given to ways religion has influenced science, and science religion.
Prerequisite: 1 course in Religion.

RELI 3313 Religion and Science in Asia
An examination and discussion of issues in the history of the relation of religion and science in Chinese, Hindu, and Islamic cultures. Topics will include cosmology, astronomy, and astrology, on one hand, and biology and traditional systems of medicine, on the other. Major theoretical issues will include the colonized discourse on religion and science in the Asian context, the variety of traditional Asian responses to modern science, and the impact of cultural perspectives on the scientific enterprise.
Prerequisite: 1 course in Religion.

RELI 3315 The Holocaust: Jewish and Christian Responses
An examination of the crisis of faith for Jews and Christians in response to the systematic murder of Jews, Gypsies, homosexuals, and others. Attention to the perspectives of perpetrators, bystanders, victims, and survivors; religious explanations and ethical responses.
Prerequisite: 1 course in Religion.

RELI 3318 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.
Prerequisite: One course in Religion.

RELI 3331 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. Field trips and/or interviews are an integral part of the course.

Prerequisite: RELI 1330.

RELI 3332 The Buddhist Tradition
An inquiry into the meaning of the Buddha's life, and an examination of his teachings and their expression in the Buddhist community; attention to meditational practices, ritual, ethics, and major religious-philosophical issues within the various schools of South and East Asian Buddhism.
Prerequisite: RELI 1330.

RELI 3333 Chinese Religions
A study of the indigenous religious traditions of China in cultural and historical perspective, including Religious Taoism, Confucianism, and Yin-Yang cosmology. Topics for discussion will include cosmology, ritual and myth, religious self-cultivation, and the interaction between humankind and the sacred.
Prerequisite: RELI 1330 or consent of instructor.

RELI 3334 Japanese Religions
A study of the Japanese religious experience in cultural and historical perspective, including indigenous traditions (Shinto) and Japanese appropriation of religions imported from China and the West. Traditions to be examined will include village and state Shinto; Esoteric Buddhism, Zen, and Pure Land sectarianism; Shinto-Buddhist interaction; and new religious movements.
Prerequisite: RELI 1330 or consent of instructor.

RELI 3338 Greek Religious Experience
A study of Greek religious festivals designed to produce a coherent image of a year in the religious life of the ancient Greeks. Through a combination of archaeological and literary evidence, we will attempt to reconstruct the rituals performed at the various festivals and explore the ways in which they organized and articulated the community through shared religious experience. We shall also consider the ways in which religion organized civic space and gave it meaning. (Also listed as CLAS 3338.)

RELI 3341 The Jewish Tradition
A study of the major religious developments and issues within Judaism, as reflected in selected literature drawn from the biblical, rabbinic, medieval, and early modern periods.
Prerequisite: RELI 2354.

RELI 3342 The Christian Tradition
A study of the historical development of Christian doctrine and practice as reflected in selected scriptures, creeds, and theological works from the early church to modern times. Attention will be given to Catholicism, Orthodoxy, and Protestantism.
Prerequisite: RELI 2355.

RELI 3343 Classical Islam
An examination of Islam as a diverse, living tradition practiced by hundreds of millions of people around the world. Will include discussion of the foundations of Islamic religion and of issues such as women and Islam, the jihad, and Islamic fundamentalism.
Prerequisite: RELI 2356.

RELI 3346 Islamic Literatures
The course will examine a range of literary writings from the early and modern Islamic worlds with a view to gaining insights into the prevailing themes of these literary works and their relevance for understanding the historically changing interconnections between self, society, and religion. Students will read an array of literary genres from two broad successive epochs of Islamic history: the Age of Empires (9^{th} to late 18^{th} centuries, C.E.) and the Post-Colonial Age (19^{th} to 21^{st} centuries, C.E.). The course also lays stress upon exposure to the cultural and regional diversity of Islamic civilization, and hence students will be exposed to literary works in translation from the Arabic, Persian, Turkish, and Urdu languages.
Prerequisite: RELI 2356.

RELI 3353 The Gospels, Jesus, and Christian Origins
A study of the earliest extant literary portrayals of Jesus, with attention to what can be known about his life, message, activity, and fate as well as his significance for the origins of Christianity.
Prerequisite: RELI 2355.

RELI 3354 The Letters of Paul
A study of the extant writings attributed to Paul and included in the New Testament, with attention to the historical, cultural, religious, and literary context of these writings and to Paul's influence in early Christianity and in the history of Christian thought.
Prerequisite: RELI 2355.

RELI 3355 Non-Canonical Early Christian Literature
This course examines the wide range of early Christian experiences by examining a number of Christian writings from the first few centuries of the movement. We will focus on non-canonical early Christian literature, the social and historical contexts of a number of expressions of Christianity, as well as the process of the formation of the early Christian canon.
Prerequisite: RELI 2355.

RELI 3360 Philosophy of Religion
A critical discussion of philosophical issues arising in religion and theology. Typical topics covered include: religious language, arguments for God's existence, religious experience, miracles and revelation, the relationship of faith and reason, the nature of God, the problem of evil, death and immortality. (Also listed as PHIL 3338.)
Prerequisite: PHIL 1301 or 1354.

RELI 3370 Sociology of Religion
A study of institutionalized and non-institutionalized forms of religious expression. Various forms of religious expression, their social sources, and their societal consequences will be examined. The relation between religion and secular institutions (the economy, polity, education, etc.) will be investigated. Particular attention will be focused on emerging forms of religious expression in modern urban-industrialized society. (Also listed as SOCI 3333.)

RELI 3380 **U.S. Latino Religious Practices and Traditions**
This course examines the beliefs, theologies, and practices of diverse U.S. Latino communities. In addition to Catholicism and Protestantism, the course will review the impact of African and Native American religious traditions. The course critically examines how U.S. Latino religious experiences impact race, class, gender, and sexuality with a particular emphasis on examining the Latino community in San Antonio.
Prerequisite: RELI 1360.

RELI 3-90 **Reading and Conference**
Individual work under supervision in areas not covered by other courses.
Prerequisites: 12 semester hours in religion and approval of the department chair and instructor.

RELI 3-91 **Special Topics in Religion**
From time to time, the department will offer special topic courses not described in the Bulletin. The topics may be in any area and may be offered at the initiative of departmental faculty or upon petition of interested students. Announcements of such courses will be by special prospectus. May be repeated on different topics.
Prerequisite: Approval of instructor.

UPPER DIVISION COURSES AT THE 4000 LEVEL

Junior standing and completion of 9 semester hours in the academic study of Religion or consent of instructor is prerequisite to taking 4000-level courses.

RELI 4394 **Approaches to the Study of Religion**
An inquiry into the nature of religion and ways in which it is studied and described; topics may include self and other within religious traditions, religious pluralism, comparative studies of religion, sociological and psychological functions of religion, and the relation between religion and culture. This course fulfills the Senior Experience requirement of the University's Common Curriculum.
Prerequisites: Senior standing and 3 courses in Religion.

SCIENTIFIC COMPUTING

FACULTY ADVISORY COMMITTEE:

FARZAN AMINIAN, Ph.D., Professor, Engineering Science
SABER ELAYDI, Ph.D., Professor, Mathematics; Chair
JULIO ROBERTO HASFURA-BUENAGA, Ph.D., Associate Professor, Mathematics
ALLEN HOLDER, Ph.D., Associate Professor, Mathematics
MARK LEWIS, Ph.D., Associate Professor, Computer Science
KEVIN D. LIVINGSTONE, Ph.D., Associate Professor, Biology
NATASA MACURA, Ph.D., Associate Professor, Mathematics
DAVID O. RIBBLE, Ph.D., Professor, Biology
DENNIS W. UGOLINI, Ph.D., Associate Professor, Physics and Astronomy
ADAM URBACH, Ph.D., Assistant Professor, Chemistry

THE MINOR

Scientific Computing is a multi-disciplinary program designed for science majors who wish to explore the application of computing within the natural sciences. It is intended primarily for students majoring in one of the natural sciences or engineering. The program of study brings together courses from Computer Science, Mathematics, and disciplines in the natural sciences. Each student takes the required core courses in computer science and calculus. After the core, two advanced-level courses selected from five options further hone quantitative skills needed for scientific computing. Students should work with their advisors to identify courses that are most appropriate for their backgrounds and goals. Finally, students bring their computation skills to their major by selecting one upper-level course from a list of approved disciplinary courses that make use of computation. Concurrent with this course, students enroll in SCOM 3199 – Scientific Computing Project. Note: These disciplinary courses have several prerequisites that are not listed among the requirements for a minor in Scientific Computing – students majoring in a discipline among the natural sciences will have already fulfilled these prerequisites as part of their major.

Students interested in a Scientific Computing minor will submit an application to the chair of the Committee, who will assign a faculty advisor to the student. Completion of this program will be indicated on the student's transcript with the notation "Minor in Scientific Computing."

A minor in Scientific Computing will consist of a total of 19 to 20 semester hours, depending on the upper-level course selected in the major. The minor must include at least nine hours of upper-division courses in mathematics or science. The requirements for a minor in Scientific Computing are as follows:

The Core (9 hours)

Computation

CSCI 1320	Principles of Algorithm Design I
CSCI 2323	Scientific Computing

Calculus

MATH 1307	Calculus A
	OR
MATH 1311	Calculus I

Advanced Quantitative Skills (6 hours)

Take two of the following five courses:

CSCI 3352	Simulation Theory
MATH 3310	Mathematical Models in Life Sciences
MATH 3311	Probabilistic Models in Life Sciences
MATH 3320	Probability and Statistics for Engineers and Scientists
MATH 3338	Mathematical Modeling

Disciplinary Practice (4-5 hours depending on the chosen elective)

SCOM 3199	Scientific Computing Project
	[Must be taken in conjunction with one of the courses listed below.]

And **one** of the following courses:

BIOL 3434	Ecology
BIOL 3440	Animal Behavior
BIOL 3444	Molecular Biology
CHEM 3334	Physical Chemistry (includes lab CHEM 3135)
MATH 4394*	Senior Project
PHYS 3321	Statistical Physics and Thermodynamics
PHYS 3322	Classical Mechanics and Nonlinear Dynamics
PHYS 3325	Optical Physics
PHYS 3336	Advanced Theoretical Physics
PHYS 4343	Quantum Physics II
PHYS 4346	Advanced Modern Physics
PSYC 3311	Sensation and Perception
PSYC 3331	Memory and Cognition
PSYC 3333	Simulation of Neural and Cognitive Processes

* This course requires completion of a 3000-level course in Biology or Psychology.

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).
Corequisite: Enrollment in this course requires concurrent enrollment in one of the disciplinary practice courses approved for section C – Disciplinary Practice of the requirements for a minor in Scientific Computing.

SOCIOLOGY AND ANTHROPOLOGY

JOHN M. DONAHUE, Ph.D., Professor
CHRISTINE DRENNON, Ph.D., Associate Professor
CYNTHIA S. GENTRY, Ph.D., Associate Professor
MICHAEL C. KEARL, Ph.D., Professor
MEREDITH B. McGUIRE, Ph.D., Professor
JENNIFER P. MATHEWS, Ph.D., Associate Professor
TAHIR H. NAQVI, Ph.D., Assistant Professor
RICHARD K. REED, Ph.D., Professor; Chair
DAVID SPENER, Ph.D., Associate Professor
AMY L. STONE, Ph.D., Assistant Professor
SHERYL R. TYNES, Ph.D., Professor; Associate Vice President for Academic Affairs

THE MAJOR

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

I. The common curriculum

II. Departmental requirements:

A. The Sociology major consists of 30 semester hours to be taken as follows:
1. At least one of the following courses: SOCI 1301, 1316, 2306, 2311, or 2312.
2. Required courses: SOCI 3359 and 4361.
3. At least one of the following courses: SOCI 3360, 3361, or 3365.
4. At least 21 hours must be in upper division courses.

B. The Anthropology major consists of 30 semester hours to be taken as follows:
1. At least one of the following courses: ANTH 1301, 1305, or 2310.
2. Required courses: ANTH 2301, 3359, and 4361.
3. At least one of the following courses: ANTH 3360, 3361, or 3365.
4. One additional course in Archaeology of Physical Anthropology; and one additional course in Social Anthropology (see department for course list).
5. At least 21 hours must be in upper division courses chosen in consultation with the advisor.

III. Senior Experience completed by one of the following:

ANTH 4395 or SOCI 4395 (Senior Thesis).
ANTH 4-90 or SOCI 4-90 (Senior Independent Study)
ANTH 4196 or SOCI 4196 (Mini-Conference).
GNED 4300 (Senior Interdisciplinary Seminar).

IV. Electives sufficient to total 124 semester hours.

THE MINOR

Two minors are offered in the Department of Sociology and Anthropology. The department requirements:

A. The Sociology minor consists of 18 semester hours to be taken as follows:
1. Completion of at least one of the following courses: SOCI 1301, 1316, 2306, 2311, 2312, or 2314.
2. At least 12 hours must be in upper division courses.

B. The Anthropology minor consists of 18 semester hours to be taken as follows:
1. Completion of at least two of the following courses: ANTH 1301, 1305, or 2310.
2. At least 12 hours must be in upper division courses.

Minors are strongly recommended to complete ANTH 4196 or SOCI 4196.

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.

SOCIOLOGY COURSES

LOWER DIVISION (NO PREREQUISITES)

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.

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.)

SOCI 1316 Places and Regions 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 2306 Introduction to Social Psychology
This course examines the effects of culture and social structure upon the thoughts, emotions, identities, and behaviors of individuals - how the individual exists within society and how society exists within the individual. Topics include how language and stereotypes shape perception, prejudice, how birth order and family dynamics shape personality, television's impacts upon sexuality and aggression, the historical evolution of individualism, urban psychology, and how group dynamics influence the success of sports teams and the creativity of think tanks.

SOCI 2311 Sociology of Sex Roles
An analysis of social, psychological, and physiological approaches to the development of sex identity and sex roles. Differential socialization methods from infancy through adolescence will be examined along with the impact on both men and women of contemporary changes in sex roles.

SOCI 2312 Sociology of Marriage and the Family Experience
An examination of the various structures and functions of the family as the basic social institution of society. Special attention will be given to conflict and change as it has occurred in modern industrial America resulting in a diversification of family types and mores.

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.

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.

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.)

UPPER DIVISION

(Any one lower division course satisfies the prerequisite for upper division courses unless otherwise noted.)

SOCI 3313 Social Movements
Social movements have the power to transform existing social structures and individual attitudes about social issues. The sociological study of social movements emphasizes how political, organizational, and cultural factors shape their emergence and development. Cases studied in this class may include the women's movements, gay/lesbian activism, environmental movement, the civil rights movement, and disability rights activism.

SOCI 3324 Crime and Delinquency
An examination of the causes, treatment, and prevention of delinquent and criminal behavior; including political, corporate, and governmental criminal behavior.

SOCI 3325 Drugs and Society
A sociological overview of policies regarding and use of a range of licit and illicit drugs, examining drugs over time and across social groups with a focus on the importance of politics, culture, power, and economics. Sociological theories will be introduced to explain the conceptualization of drug use and abuse.

SOCI 3327 Contemporary Minorities
A study of minority-dominant intergroup relations with an emphasis on historical, cultural, and power differentials. Emphasis will be on inequality and inter-group conflict with particular attention given the recent political activism of some minorities and the implications for social change. (Also listed as ANTH 3327.)

SOCI 3329 Sexuality and Society
An investigation of the social construction and regulation of sexuality across cultures and through time. This perspective on sexuality looks at social, rather than biological or personal, explanations for how human sexuality is practiced. Specific topics may include queer studies, queer communities, and HIV/AIDS in society. (Also listed as ANTH 3329.)

SOCI 3330 Sociolinguistics
An introduction to linguistic theories of change. Emphasis on linguistic analysis of languages in change. (Also listed as ENGL 3347 and ANTH 3330.)

SOCI 3331 Language, Culture and Society
Students will analyze the functions of language in everyday life in various cultures, including the role of language in the social production and reproduction of power relations, stratification, gender roles, the formation of racial and ethnic identities, and in the process of social change. (Also listed as ANTH 3331.)

SOCI 3332 Sociology of Health and Illness
A study of the social and cultural definitions of health and illness, social sources of illness, social roles of the "sick," the nature of the illness experience, and the structure of societal institutions that deal with health and illness. (Also listed as URBS 3332.)

SOCI 3333 Sociology of Religion
A study of institutionalized and non-institutionalized forms of religious expression. Various forms of religious expression, their social sources, and their societal consequences will be examined. The relation between religion and secular institutions (the economy, polity, education, etc.) will be investigated. Particular attention will be focused on emerging forms of religious expression in modern, urban-industrialized society. (Also listed as RELI 3370.)

SOCI 3337 Organizations: Private, Public and Popular
Business, government, and social movement organizations in their historic, economic, and political contexts; how organizational structures constrain individuals, and how individuals reform, subvert, and/or rebel against those structures. Applying theories to our own organizational environments (present and future), we will focus on characteristics of organizations and the interrelationships of organizational actors.

SOCI 3338 Work and Professions
This course analyzes the social structure of people's work in the context of the global economy. Topics include the relation between work and stratification (e.g., by social class, age, gender, race, and ethnicity), worker socialization and networks, occupational health and illness, unemployment, underemployment and retirement, the formal organizational contexts of work, the process of professionalization credentialing, and de-skilling, the impact of social and technological changes on the nature of work and the workplace. One special focus will be on women's work, including comparisons between industrialized and non-industrialized economies and various economic systems. Students will also examine the nature of work in the San Antonio and South Texas economy.

SOCI 3339 The Welfare State
This course systematically focuses on the complex organizations comprising and spawned by the welfare state. The general purpose of the course is two-fold. First, the historical, demographic, economic, and political macrodynamics of welfare state evolution are addressed. Second, the complex interrelationships between the broader social environment, organizations that comprise the welfare state, and individuals, are utilized to illustrate the linkages among them.
Prerequisite: SOCI 1301 or consent of instructor.

SOCI 3340 Urban Geography
This course examines the history and contemporary processes of urbanization, primarily in the North American context. In particular, we are concerned with the geography of these processes, resulting in differentiation of space and the creation of distinct places. We will examine the geography of urbanization at several scales, ranging from the development of the North American urban system to the experiences of neighborhoods within cities. (Also listed as URBS 3340.)

SOCI 3343 Relaciones fronterizas México-Estados Unidos (bilingüe)
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 the Spanish across the Curriculum component of Trinity University's International Studies Program. It is conducted bilingually in Spanish and English, i.e., in both languages of the Mexico-U.S. border region. Competence in speaking, reading, writing, and listening in both Spanish and English is a requirement for participation in the course. (Also listed as ANTH 3343 and INTL 3343.)
Prerequisites: Completion of SPAN 2302 or equivalent Spanish competence and consent of instructor.

SOCI 3346 Childhood and Youth
Social factors surrounding childhood, and children's perceptions of social life, reveal a great deal about society in general. The purpose of this course is to provide a sociological framework for understanding the roles of childhood and youth in society. This framework will involve historical, cross-cultural, economic, and political considerations of childhood and young adulthood. Using comparative and historical methods we will examine the changing social status of children. Various social institutions (such as families, education, and the media) will be studied. Finally, we will study how contemporary American children and young adults fare, and why this is so.
Prerequisite: SOCI 1301 or consent of instructor.

SOCI 3347 The Aging Revolution
With an estimated 20 percent of everyone who has reached the age of 65 being now alive, it is not surprising that the United Nations proclaimed 1999 to be the International Year of Older Persons. Contemporary generations, particularly those in developing nations, are among the first in history to be raised with the expectation of old age, forerunners of a longevity revolution that will be felt for centuries to come. Using the theoretical and methodological tools of the social sciences, this course investigates both the personal and social ramifications of this great demographic event, developing the interrelationships between the biological, psychological, social, and cultural aspects of old age.

SOCI 3348 Death and Dying
A critical overview of the social and cultural sources of humanity's outlooks and practices toward the dying and the dead. Beginning with historical and cross-cultural analyses of death systems, the course proceeds to develop sociologically the roles of religion, philosophy, psychology, science, politics and medicine in shaping orientations toward war, abortion, suicide, environmental destruction, organ transplants, euthanasia, funerary ritual and capital punishment. It concludes with analyses of the experiences of those who die and those who survive. (Also listed as ANTH 3348.)

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 besupplemented with an examination of current issues in the development and application of law.

SOCI 3351 Sociology of Knowledge

A study of the social structural factors that influence the nature and development of knowledge systems. The reciprocal relation between the social structure and various elements of knowledge (ideas, ideologies, science, and technology, for instance) will constitute a major focal point of the course. Ideology and science as social products will be important topics of study. The contributions of Marx, Durkheim, Mannheim, Scheler, Merton, Berger, and Luckmann, among others, will be considered.

SOCI 3359 Social Research Design

An introduction to the basic research techniques used in the social sciences with an emphasis on research design, data collection, and analysis. This course will include an overview of common methods within the social sciences, including ethnography, qualitative interviews, focus groups, historical comparative methods, experiments, and survey methods. Attention will be given to the analysis of both quantitative and qualitative data using computer software. (Also listed as ANTH 3359.)

SOCI 3360 Research Methods: Applied Social Statistics

This course provides a hands-on approach for learning how to undertake quantitative social research focused on the design and completion of a semester-long research project. A variety of statistical tools are addressed, including descriptive statistics, tests of significance, 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 ANTH 3360 and URBS 3360.)
Prerequisite: SOCI 3359 or ANTH 3359 or consent of instructor.

SOCI 3365 Research Methods: GIS

This course provides a hands-on approach for learning how to undertake spatial social research focused on the design and completion of a semester-long research project. Spatial tools introduced emphasize geographic information systems. The course goals include map making and the integration of information technology and cartography. (Also listed as ANTH 3365 and URBS 3365.)
Prerequisite: SOCI 3359 or ANTH 3359 or consent of instructor.

SOCI 4352 Mind, Body & Society: Seminar

This course examines the nature of mind, body and society, and the intimate dialectical relationship among them. Individual minds make human society possible, while the emergence of the individual mind or consciousness occurs through social processes. Human minds and social being exist in the framework of a material body, which profoundly influences social behavior and individual experience. (Also listed as ANTH 4352.)
Prerequisites: Junior standing, and at least 2 of the following courses: SOCI 2311, 2323, 3327, 3332, 4361, ANTH 3327, 3364, 3367, 4361, WAGS 2310.

SOCI 4361 Social Theory

A critical survey of the foremost paradigms in contemporary sociological and anthropological theory. The course emphasizes the historical intellectual location of major theoretical traditions, especially the works of Durkheim, Marx, and Weber. Contemporary schools of thought include functionalism, cultural ecology, conflict and rational choice theories, symbolic interactionism and dramaturgical analysis, phenomenology and ethnomethodology, structuralism, feminist theories, world systems analysis and structuration theory. For each, special attention is given to how to evaluate theories and how theoretical paradigms are linked to empirical research. (Also listed as ANTH 4361.)
Prerequisites: Five Anthropology (Sociology) courses and consent of instructor.

SOCI 4362 Globalization and International Development

Advanced seminar studying the relationship between economic development and social change at the international level. Examines the rise of capitalism as a global mode of production and its impact on local cultures in the contemporary period. Special attention paid to the rise of transnational communities and grassroots movements for social justice. (Also listed as ANTH 4362.)
Prerequisites: Junior standing and completion of at least one lower-division sociology course or SOCI 1301 or 2357.

SOCI 3-91 Special Topics in Sociology

Occasional courses will be offered on current events or desired topics that students bring to the attention of the Department Chair. A student may repeat this course if the topics are different. A maximum of nine semester hours can be taken in SOCI 3-91 or 3-94.

SOCI 3-94 Seminar

Topics will vary as necessitated by student interest. A student may repeat the course if the topics are different. A maximum of nine hours can be taken in SOCI
3-94 or 3-91.

SOCI 4394 Seminar

Topics will vary as necessitated by student interest. A student may repeat the course if the topics are different, for a maximum of nine hours.

Courses arranged on an independent study basis with the guidance and consent of the instructor:

SOCI 3-71, 4-71 Sociology Internship

Field work experience in a setting arranged and approved by the student, professor, and agency selected. Supervision and guidance must be provided in the field and contact with the professor must be maintained. A student may repeat the course for a maximum of six semester hours. This course is taken Pass/Fail.

SOCI 3-90 Sociology Independent Study

Individual research in selected areas. A student may repeat the course for a maximum of six semester hours. A project proposal must be submitted to and approved by the professor supervising the research prior to registration.

SOCI 4-90 Senior Independent Study

Faculty-directed individual research in selected areas for sociology majors' senior experience. A project proposal must be submitted to and approved by the professor supervising the research prior to registration. One option is SOCI 4-90, which a student takes in conjunction with an existing course taught by a faculty member and, under the faculty member's supervision, produces a more substantial senior-level project beyond what is expected for others enrolled in the course.

SOCI 4196 Sociology Mini Conference

Sociology majors will complete a 1-credit course that teaches professional skills for making a conference paper or poster presentation.

Students will be required to: 1) attend two, hour and a half-long sessions given by the department on putting together professional poster-session and conference paper presentations; and 2) rework a research paper from a previous upper-division Sociology course and present it as either a poster or conference paper presentation at the Sociology and Anthropology Mini-Conference in the Spring semester of the Senior year. Outside experts in sociology will be brought in to judge the best sociology presentation. This course satisfies the Senior Experience requirement of the University's Common Curriculum.
Prerequisite: Senior standing.

SOCI 4395 Senior Thesis
Students will produce a written thesis on a topic of their choice during the course of one semester. The Sociology faculty will consider and review theses nominated by the advising instructor. Students must have their thesis proposal approved by the Sociology faculty in the semester prior to registering for the course. This course satisfies the Senior Experience requirement of the University's Common Curriculum.
Prerequisites: Permission of advising instructor and Senior standing.

ANTHROPOLOGY COURSES

LOWER DIVISION (NO PREREQUISITES)

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.

ANTH 1303 Japanese Perspectives
This course introduces the student to Japanese culture in its religious, political, aesthetic, and social dimensions especially as each is affected by Western influences. (Also listed as GNED 1303 and ML&L 1303.)

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.

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, harborworks, 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 1351 Music Cultures of the World
This course explores the music of various cultures around the world. Using the case study approach, students will learn about the music and sociology of selected regions that may include West Africa, Asia, India, and the American Southwest. Students will undertake fieldwork in San Antonio to gain practical experience in ethnomusicological fieldwork. This is an introductory course appropriate for non-majors as well as music students. No prior musical experience is required, but students without musical backgrounds must learn a vocabulary of terms for describing musical sound. (Also listed as MUSC 1351.)

ANTH 2301 The Anthropological Imagination
This course provides potential anthropology majors a comprehensive understanding of anthropology as an academic discipline, focusing on anthropologists and what they do. Rather than read a text or abstract debates, the class studies specific anthropologists and the classic ethnographies they wrote, looking at how each work was shaped by the particular life and time of the author. Classic studies will be chosen from each of the major periods in anthropology's history: from functionalism and structuralism to more recent work in Marxist, feminist, and interpretive anthropology.

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.

ANTH 2357 Humans and the Environment
The seminar will analyze humans' relationship with the natural environment. It will first focus on cultural adaptation to natural resources, with case studies drawn from African foragers, South American gardeners, and Asian farmers. The course will also analyze the effects of contemporary development, focusing on the destruction of the rainforest. The class will try to create new models for development from indigenous peoples' use of tropical resources.

UPPER DIVISION

(ANTH 1301, 1305, 2301, or 2310 is a prerequisite for all upper division courses unless special permission is granted.)

ANTH 3120 La historia cultural del baile latinoamericano (The Cultural History of Latin American Dance)
An examination of the cultural influences on contemporary Latin American dance, including dances of European, African, or mestizo origin, such as the cumbia, samba, tango, waltz criollo, polka, salsa, merengue, and vallenato, as well as indigenous dances such as the cueca, huayno, diablada, and morenada. This course will be taught entirely in Spanish and will include demonstrations of the several dance steps. (Also listed as INTL 3120.)

Prerequisite: SPAN 2302 or the equivalent.

ANTH 3327 Contemporary Minorities
A study of minority-dominant intergroup relations with an emphasis on historical, cultural, and power differentials. Emphasis will be on inequality and inter-group conflict with particular attention given the recent political activism of some minorities and the implications for social change. (Also listed as SOCI 3327.)

ANTH 3329 Sexuality and Society
An investigation of the social construction and regulation of sexuality across cultures and through time. This perspective on sexuality looks at social, rather than biological or personal, explanations for how human sexuality is practiced. Specific topics may include queer studies, queer communities, and HIV/AIDS in society. (Also listed as SOCI 3329.)

ANTH 3330 Sociolinguistics
An introduction to linguistic theories of change. Emphasis on linguistic analysis of languages in change. (Also listed as ENGL 3347 and SOCI 3330.)

ANTH 3331 Language, Culture and Society
Students will analyze the functions of language in everyday life in various cultures, including the role of language in the social production and reproduction of power relations, stratification, gender roles, the formation of racial and ethnic identities, and in the process of social change. (Also listed as SOCI 3331.)

ANTH 3332 Intercultural Communication
Examines theory, research, and the application of communication in an intercultural context with an emphasis on verbal and non-verbal language variables; world view; acculturation; diffusion of innovation; and training for foreign assignments. (Also listed as SPCH 3372.)

ANTH 3343 Relaciones fronterizas México-Estados Unidos (bilingüe)
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 the Spanish across the Curriculum component of Trinity University's International Studies Program. It is conducted bilingually in Spanish and English, i.e., in both languages of the Mexico-U.S. border region. Competence in speaking, reading, writing, and listening in both Spanish and English is a requirement for participation in the course. (Also listed as INTL 3343 and SOCI 3343.)
Prerequisites: Completion of SPAN 2302 or equivalent Spanish competence and consent of instructor.

ANTH 3348 Death and Dying
A critical overview of the social and cultural sources of humanity's outlooks and practices toward the dying and the dead. Beginning with historical and cross-cultural analyses of death systems, the course proceeds to develop sociologically the roles of religion, philosophy, psychology, science, politics and medicine in shaping orientations toward war, abortion, suicide, environmental destruction, organ transplants, euthanasia, funerary ritual and capital punishment. It concludes with analyses of the experiences of those who die and those who survive. (Also listed as SOCI 3348.)

ANTH 3351 The Archaeology of Ancient Mexico and Peru
Intensive study of cultural evolution in Mesoamerica and Peru with special emphases on complex societies such as the Toltec, Aztec, and the Inca. The Spanish conquest and its effects on native societies will also be examined using both archaeological and historical sources.

ANTH 3356 Seminar on the Ancient Maya
This course surveys the culture of 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.
Prerequisite: ANTH 1305.

ANTH 3357 Pre-Columbian Art of Mesoamerica
This course is a survey of the art of Mesoamerica and will examine the art of the Olmec, Western Mexico, Gulf Coast, Teotihuacan, Maya, Toltecs, Zapotecs, Mixtecs, and the Aztecs. Art mediums will include architecture, sculpture, ceramics and other portable art, murals, ancient manuscripts such as codices, jewelry, and even graffiti. Students will have an opportunity to work with materials on and off-exhibit in the Pre-Columbia collection at the San Antonio Museum of Art for their research papers. (Also listed as ARTH 3335.)

ANTH 3358 The Anthropology of International Relations
An examination of the processes of culture contact among the peoples of Europe, Africa, Asia, and the New World, and its effect on the distribution of wealth, power, and status in the modern world system. Topics to be covered include colonialism, nationalism, and cultural revitalization with special emphasis on Africa and Latin America.

ANTH 3359 Social Research Design
An introduction to the basic research techniques used in the social sciences with an emphasis on research design, data collection, and analysis. This course will include an overview of common methods within the social sciences, including ethnography, qualitative interviews, focus groups, historical comparative methods, experiments, and survey methods. Attention will be given to the analysis of both quantitative and qualitative data using computer software. (Also listed as SOCI 3359.)

ANTH 3360 Research Methods: Applied Social Statistics
This course provides a hands-on approach for learning how to undertake quantitative social research focused on the design and completion of a semester-long research project. A variety of statistical tools are addressed, including descriptive statistics, tests of significance, 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 3360 and URBS 3360.)
Prerequisite: ANTH 3359 or SOCI 3359 or consent of instructor.

ANTH 3361 Research Methods: Fieldwork
This course provides a hands-on approach for learning how to undertake qualitative research through fieldwork, focused on the design and completion of a semester-long research project. The course goals emphasize survey and interview techniques, writing and rewriting, and understanding how to present results in an accurate and effective manner. (Also listed as SOCI 3361.)
Prerequisite: ANTH 3359 or SOCI 3359 or consent of instructor.

ANTH 3362 Food and Culture

Students will examine the social context of food in which it is produced, distributed, and consumed among different cultures and in the contemporary global political economy. Topics include the cultural context of food choice, the political economy of world hunger, corporate challenges to food self-sufficiency, and food and nutritional politics in the contemporary United States.

ANTH 3363 Water, Culture, and Power

Students will analyze the impact of water resource development on peoples, the varied cultural meanings of water and water resources, as well as the political process of funding and building water resource projects. Tensions between culture and power will be analyzed as they structure perceptions and experiences of water scarcity, transforming water from a natural resource into a social construction.

ANTH 3364 Economic Anthropology

The course addresses rationality and morality in economic relations from a cross-cultural perspective. Lectures and readings will draw on neoclassical, Marxist, and cultural ecological models and look at case studies in Southeast Asia and Latin America. In addition to analyzing tribal and peasant economies, this course will study theories of global economic development.

ANTH 3365 Research Methods: GIS

This course provides a hands-on approach for learning how to undertake spatial social research focused on the design and completion of a semester-long research project. Spatial tools introduced emphasize geographic information systems. The course goals include map making and the integration of information technology and cartography. (Also listed as SOCI 3365 and URBS 3365.)
Prerequisite: SOCI 3359 or ANTH 3359 or consent of instructor.

ANTH 3366 Anthropological Forensics

This course is a broad overview of anthropological forensics and will include a number of hands-on laboratory projects in which students will learn to catalogue human remains, as well as determine age, sex, ancestry, and stature from human bones. Additionally, there will be a focus on forensics and human rights, specific forensic case studies, as well as general techniques such as fingerprinting, hair analysis, and DNA fingerprinting.
Prerequisite: ANTH 2310 or consent of instructor.

ANTH 3367 South American Indigenous Peoples: Conquest and Development

The impact of colonialism and development on tropical forest and Andean Indian societies in South America with emphasis of the influence of native social and cultural systems in these groups' relations with national societies and international economies.

ANTH 3-91 Anthropology Special Topics

Occasional courses will be offered on current events or desired topics that students bring to the attention of the Department Chair. A student may repeat this course if the topics are different. A maximum of nine semester hours can be taken in ANTH 3-91 or 3394.

ANTH 4-90 Senior Independent Study

Faculty-directed individual research in selected areas for sociology majors' senior experience. A project proposal must be submitted to and approved by the professor supervising the research prior to registration. One option is ANTH 4-90, which a student takes in conjunction with an existing course taught by a faculty member and, under the faculty member's supervision, produces a more substantial senior-level project beyond what is expected for others enrolled in the course.

ANTH 4352 Mind, Body & Society: Seminar

This course examines the nature of mind, body and society, and the intimate dialectical relationship among them. Individual minds make human society possible, while the emergence of the individual mind or consciousness occurs through social processes. Human minds and social being exist in the framework of a material body, which profoundly influences social behavior and individual experience. (Also listed as SOCI 4352.)
Prerequisites: Junior standing, and at least 2 of the following courses: SOCI 2311, 2323, 3327, 3332, 4361, ANTH 3327, 3364, 3367, 4361, WAGS 2310.

ANTH 4354 Seminar on Primatology

Advanced study of human evolution, ecological conservation, and culture and behavior by investigation of human's closest living relatives, the non-human primates. Includes completion of a research project involving primate observation and original data collection about primate behavior.
Prerequisite: ANTH 2310.

ANTH 4361 Social Theory

A critical survey of the foremost paradigms in contemporary sociological and anthropological theory. The course emphasizes the historical intellectual location of major theoretical traditions, especially the works of Durkheim, Marx, and Weber. Contemporary schools of thought include functionalism, cultural ecology, conflict and rational choice theories, symbolic interactionism and dramaturgical analysis, phenomenology and ethnomethodology, structuralism, feminist theories, world systems analysis, and structuration theory. For each, special attention is given to how to evaluate theories and how theoretical paradigms are linked to empirical research. (Also listed as SOCI 4361.)
Prerequisites: Five Sociology (Anthropology) courses and consent of instructor.

ANTH 4362 Globalization and International Development

Advanced seminar studying 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 4362.)
Prerequisites: Junior standing and completion of at least one lower-division sociology course or ANTH 1301 or 2357.

ANTH 3394, 4394 Seminar

Topics will vary as necessitated by student interest. A student may repeat the course if the topics are different for a maximum of nine semester hours.

Courses arranged on an independent study basis with the guidance and consent of instructor:

ANTH 3-71, 4-71 Anthropology Internship

Field work experience in a setting arranged and approved by the student, professor, and agency selected. Supervision and guidance must be provided in the field and contact with the professor must be maintained. A student may repeat the course for a maximum of six semester hours. This course is taken Pass/Fail.

ANTH 3-72, 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.)

ANTH 3-73 Archaeological Fieldwork

Field work experience in a setting arranged and approved by the student, professor, and agency selected. Supervision and guidance must be provided in the field.

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.

ANTH 4196 Anthropology Mini Conference

Anthropology majors will complete a 1-credit course that teaches professional skills for making a conference paper or poster presentation. Students will be required to: 1) attend two, hour and a half-long sessions given by the department on putting together professional poster-session and conference paper presentations; and 2) rework a research paper from a previous upper-division Anthropology course and present it as either a poster or conference paper presentation at the Sociology and Anthropology Mini-Conference in the Spring semester of the Senior year. Outside experts in anthropology will be brought in to judge the best anthropology presentation. This course satisfies the Senior Experience requirement of the University's Common Curriculum.
Prerequisite: Senior standing.

ANTH 4395 Senior Thesis

Students will produce a written thesis on a topic of their choice during the course of one semester. The Anthropology faculty will consider and review theses considered outstanding by the advising instructor. Students must have their thesis proposal approved by the Anthropology faculty in the semester prior to registering for the course. This course satisfies the Senior Experience requirement of the University's Common Curriculum.
Prerequisites: Permission of advising instructor and Senior standing.

SPEECH AND DRAMA

JARROD ATCHISON, Ph.D., Assistant Professor, Speech; Director of Forensics
STACEY J. CONNELLY, Ph.D., Associate Professor, Drama; Director of Theatre
TIMOTHY S. FRANCIS, M.F.A., Technical Director and Lighting Designer, Drama
KYLE GILLETTE, Ph.D., Assistant Professor, Drama
STEVEN L. GILLIAM, M.F.A., Professor, Drama
SUSAN GILLIAM, M.A., Instructor, Speech
ANDREW C. HANSEN., Ph.D., Associate Professor, Speech; Chair
L. BROOKS HILL, Ph.D., Professor, Speech
JODI KARJALA, M.F.A., Costume Designer/Costumer, Drama
MARTIN KUSHNER, B.A., Coordinator of Theatre Arts, Drama
JOHN M. McGRATH, Ph.D., Associate Professor, Speech
SUSANNA MORROW, Ph.D., Assistant Professor, Drama
ROBERTO PRESTIGIACOMO, M.F.A., Assistant Professor, Drama

THE MAJOR

The requirements for the degree of Bachelor of Arts with a major in Speech Communication or Drama are as follows:

I. The common curriculum

II. Departmental requirements:

A. The Speech Communication major consists of 36 semester hours to be taken as follows:

1. Required core consists of 21 semester hours.
   a. Within Speech Communication (15 semester hours):
      SPCH 1300 Fundamentals of Human Communication
      SPCH 2304 Interpersonal Communication
      SPCH 3334 Persuasion
      SPCH 3350 Rhetorical Criticism (also listed as ENGL 3334)
      SPCH 4393 Capstone for Speech Communication Majors
   b. Outside Speech Communication (6 semester hours):
      COMM 1301 Mass Media
   Select one of the following in research methods:
      BUSN 2301 Statistics for Management and Economics
      MATH 1320 Statistical Methods
      PSYC 2422 Statistics and Methods I
      SOCI 3360 Research Methods: Social Statistics
2. Controlled electives consist of 9 semester hours. At least 3 semester hours must be chosen from each of the following areas:
   a. Public Communication
      SPCH 1333 Public Speaking
      SPCH 2140 Forensics
      SPCH 3340 Freedom of Speech I (also listed as PLSI 3353)
      SPCH 3374 International Communication (also listed as COMM 3322
      SPCH 4350 Political Communication (also listed as PLSI 3304)
      SPCH 4391 Special Topics in Public Communication
   b. Rhetorical and Communication Theory
      SPCH 2350 Classical Rhetorical Theory
      SPCH 2352 Modern Rhetorical Theory
      SPCH 3330 Argumentation
      SPCH 3352 Rhetorical Analysis (also listed as ENGL 3335)
   c. Communication and Social Context
      SPCH 3360 Small Group Communication
      SPCH 3362 Organizational Communication (also listed as BUSN 3311)
      SPCH 3364 Communication and Effective Leadership
      SPCH 3372 Intercultural Communication (also listed as ANTH 3332)
3. General Speech Communication Electives consist of at least 6 more hours of Speech Communication courses to achieve greater focus in the major.
4. At least 18 hours of the Speech Communication major must be upper-division coursework.

B. The Drama major consists of 40 semester hours to be taken as follows:
1. Required core consists of 28 semester hours.
   a. Theatre Practicum (4 hours):
      DRAM 1100 University Theatre Company (four semesters for a total of four credit hours; at least one semester must involve work in technical theatre)
   b. Technology and Design (6 hours):
      DRAM 1320 Introduction to Production Techniques OR
      DRAM 1330 Principles of Costume Technology
      DRAM 2310 Principles of Design
   c. Performance Theory (3 hours):

DRAM 1350 Introduction to Acting OR
DRAM 1352 Acting I

d. Advanced Performance or Design Theory (3 hours)
Choose one of the following:
DRAM 2314 Principles of Stage Lighting
DRAM 2352 Acting II: Scene Study
DRAM 3312 Costume Design
DRAM 3313 Scene Design
DRAM 3340 Directing

e. Literature and History of Theatre (9 hours):
DRAM 2332 Play Structure and Analysis
DRAM 3331 History of Theatre: The Classical Theatre to 1642
DRAM 3332 History of Theatre: The Restoration to 1850

f. Capstone for the Drama Major (3 hours):
DRAM 4393 Capstone for Drama Majors

g. 12 additional hours of drama electives of which no more than 3 credit hours of directed studies or special topic courses may be applied toward the required 40-hour major.

h. At least 15 hours of the Drama major must be upper-division coursework.

i. Additional courses in Drama may be taken, but not substituted for those listed to fulfill the major requirements.

III. Senior Experience. For either major, students may select from three options to meet this Common Curriculum requirement.
Select the appropriate capstone course: SPCH 4393 or DRAM 4393.
Complete the Honors Program in either major. Completion of the Honors Thesis will obviate the need for SPCH 4393 or DRAM 4393.
Complete the Senior Synthesis (GNED 4301) as explained under item IV in the general discussion of the Common Curriculum earlier in this *Courses of Study* Bulletin. Completion of the Senior Synthesis will obviate the need for SPCH 4393 or DRAM 4393.

THE MINOR

Two minors are available in the Department of Speech and Drama. In both minors at least 9 hours must be upper-division coursework.

SPEECH COMMUNICATION: Minor consists of 18 semester hours to be taken as follows:
6 of the 18 hours must be selected from the required core of Speech Communication courses for the major.

3 hours must be selected from each of the three controlled elective areas of the major.

DRAMA: The Drama Minor consists of 20 hours to be taken as follows.

1. Required core consists of 11 semester hours.
DRAM 1100 University Theatre Company (two semesters for a total of two semester hours)

An additional 9 hours to be selected from the following courses:
DRAM 1304 Introduction to Theatre
DRAM 1314 Introduction to Drama
DRAM 1320 Introduction to Production Techniques
DRAM 1330 Principles of Costume Technology
DRAM 1350 Introduction to Acting OR
DRAM 1352 Acting I
DRAM 2100 Stage Makeup Design
DRAM 2310 Principles of Design
DRAM 2314 Principles of Stage Lighting
DRAM 2332 Play Structure and Analysis
DRAM 2354 Vocal Performance for the Actor (also listed as SPCH 2313)
DRAM 2356 Physical Performance for the Actor
DRAM 3331 History of Theatre: The Classical Theatre to 1642 OR
DRAM 3332 History of Theatre: The Restoration to 1850

2. 9 additional hours of drama 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. Departmental requirements:

The Department of Speech and Drama offers a major Honors Program in both Speech Communication and Drama. A description of the program is available in the departmental office.

SPEECH COMMUNICATION COURSES

LOWER DIVISION

SPCH 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.

SPCH 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.

SPCH 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.

SPCH 1300 Fundamentals of Human Communication
Examines the concepts, principles, and applications of human communication theory and research with emphasis on the formats, roles, strategies, and constraints on human communication in varied social contexts.

SPCH 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. (Also listed as DRAM 1306.)

SPCH 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.

SPCH 2133 Advanced Public Speaking
Allows students 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: SPCH 1333 or permission of instructor.

SPCH 2140 Forensics
Independent research and analysis as well as group brainstorming on issues involved in the current national policy debate resolution. Offered in conjunction with participation in the intercollegiate debate program. May be repeated for no more than six credit hours.
Prerequisite: Admission by consent of instructor only.

SPCH 2304 Interpersonal Communication
A basic course in the theory and practice of interpersonal communication with emphasis on intrapersonal concerns, development and maintenance of interpersonal relations through communication, and the practical skills necessary for interpersonal effectiveness.

SPCH 2310 Introduction to the Study of Language
An introduction to language and communication systems across species. The introductory part of the course covers the major studies about animal communication systems. The main part of the course introduces the study of various human languages in both historical and descriptive terms. The structures of languages such as English, Spanish, Chinese, and Japanese are analyzed. The last part of the course introduces human language systems such as nonverbal systems, sign languages and/or computer languages. (Also listed as ENGL 2310).

SPCH 2313 Voice and Diction
Provides fundamental concepts and techniques of vocal production, voice and diction, and vocal performance training. Various modes of body/voice exploration are employed. Voice and body work are developed through multiple performance opportunities that seek to increase the performer's vocal clarity, power, flexibility, and range. (Also listed as DRAM 2354).

SPCH 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.

SPCH 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.

UPPER DIVISION

SPCH 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.

SPCH 3334 Persuasion
Examines theory, research, and practice in persuasive communication with an emphasis on the interaction of rhetorical and social scientific approaches. Considers the development of strategies and tactics for application in various contexts, especially campaigns and social movements. Addresses ethical issues and questions throughout.

SPCH 3340 Freedom of Speech
An examination, primarily through the use of decisions of the Supreme Court of the United States, of the nature and extent of the constitutional guarantee of "freedom of speech" and, more broadly, "freedom of expression," including both verbal and symbolic speech and the role of the "press" in reporting and transmitting it. (Also listed as PLSI 3353.)

SPCH 3350 Rhetorical Criticism
Examines approaches to the critical analysis of rhetorical discourse with emphasis on methodological issues as well as techniques for doing scholarly criticism. (Also listed as ENGL 3334.)

SPCH 3352 Rhetorical Analysis
Introduction to rhetoric as a mode of analysis as it applies to discursive modes and genres. (Also listed as ENGL 3335.)
Prerequisite: 6 hours of English above 1302.

SPCH 3360 Small Group Communication
The theory and practice of small group communication dynamics including the examination of such concepts as group problem-solving; discussion procedures; normative behavior; behavior of leaders and followers; conflict; and group cohesion.

SPCH 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.)

SPCH 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.

SPCH 3372 Intercultural Communication
Examines theory, research, and the application of communication in an intercultural context with an emphasis on verbal and non-verbal language variables; world view; acculturation; diffusion of innovation; and training for foreign assignments. (Also listed as ANTH 3332.)

SPCH 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.

SPCH 3-90 Directed Studies
Independent work under faculty supervision. The nature of the project will be agreed upon by the student and participating faculty member prior to registration. Credit varies from 1 to 4 semester hours, depending on the scope of the project.
Prerequisites: 15 hours in the discipline of Speech Communication, documentation of ability to undertake study, consent of instructor.

SPCH 3398 Honors Readings
Independent study in selected areas in preparation for Honors Thesis.
Prerequisite: Admission to Honors Program.

SPCH 4350 Political Communication
Studies communication aspects of the political processes in a democratic society with an emphasis on contemporary political campaigns; presidential and congressional rhetoric; and less public forms of communication in the policy-making process. (Also listed as PLSI 3304.)

SPCH 4-80 Teaching Speech and Directing Forensics Activities
Through extra- and co-curricular study, this course examines the philosophy, methods, and problems of teaching speech communication. Emphasis is given to the administration of high school forensic programs, including debate, oratory, extemporaneous speaking, and oral interpretation. Credit varies from 1 to 4 semester hours, depending on responsibilities and/or scope of the project. Course may be repeated for a maximum of 6 credit hours.
Prerequisite: 12 hours of Speech Communication or consent of instructor.

SPCH 4-85 The Speech Communication Peer Tutor
Functioning as a peer mentor in introductory speech communication courses, students will examine the philosophy, methods, and challenges of teaching speech under the direction of the speech communication instructor for the course. Credit varies from 1 to 3 semester hours, depending on responsibilities and/or scope of the project. Course may be repeated for a maximum of 6 credit hours.
Prerequisite: 15 hours of Speech or consent of instructor.

SPCH 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 Speech Communication, documentation of ability to undertake study, consent of instructor.

SPCH 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.

SPCH 4393 Capstone for Speech Communication Majors
Students will synthesize all Speech Communication coursework taken for the major into a portfolio, will research career opportunities for the application of this coursework, will write a reflective and projective paper devoted to this synthesis for future career development, and will make an oral, poster presentation of the final product to a meeting of faculty, staff, and other students toward the end of their final semester. This course fulfills the Senior Experience requirement of the University's Common Curriculum.
Prerequisite: Declared major classified as a senior.

SPCH 4394 Seminar in Speech Communication
A variable content seminar emphasizing selected topics in speech communication theory, research, and/or application. May be repeated for credit with a different topic. Maximum credit is nine credit hours.

SPCH 4-97 Speech Communication Internship
Supervised on- and off-campus experience in speech 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 Speech Communication coursework and permission of instructor.

SPCH 4398, 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. This course fulfills the Senior Experience requirement of the University's Common Curriculum.

DRAMA COURSES

LOWER DIVISION

DRAM 1100 University Theatre Company
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 DRAM 1100 but are not required to do so.

DRAM 1154 Dance for Theatre
Dance for Theatre is for students of various levels of expertise in dance, ranging from beginner to advanced, to acquire and polish their skills and convey character through dance. The topic varies based on production needs within the department, but all courses will be primarily skill-based and performance oriented, with short choreography and dance appreciation segments. Topics may include: jazz, tap, modern, ballet, choreography, and other pertinent dance forms. Course is repeatable for up to six credit hours.

DRAM 1304 Introduction to Theatre
A hands-on approach to the fundamentals of theatre including literature, acting, directing, and design. Intended as a survey, this course will provide an overview of theatre's numerous components, from the page to the stage, so that the beginning student may better understand the theatrical world.

DRAM 1306 Oral Interpretation
Examines the performative and other critical approaches to the study of literature. Investigates and explores critical methods for analyzing texts and their application to the oral study and performance of a variety of literary genres. (Also listed as SPCH 1323.)

DRAM 1314 Introduction to Drama
A survey of dramatic literature in the western canon from the 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. Assignments include two fairly short papers, a mid-term, and final examination.

DRAM 1320 Introduction to Production Techniques
Introduction to traditional stagecraft, including backstage organization, scenery construction, theatrical lighting, sound design, scene painting, and drafting. May be taken instead of DRAM 1330 as core credit toward the major.

DRAM 1330 Principles of Costume Technology
An introductory course that explores the fundamentals of costume construction, patterning and draping, textiles, and related crafts such as millinery and fabric painting and dyeing. May be taken instead of DRAM 1320 as core credit toward the major.

DRAM 1350 Introduction to Acting
This class will provide the beginning acting student with basic acting techniques and vocabulary through exercises, monologues, and scene work. (Not available for P/F option.) Students may not receive credit for both DRAM 1350 and 1352.

DRAM 1352 Acting I
This class will provide acting students with a core of techniques from which to further develop their acting skills as individuals and as members of a theatrical ensemble. The course is suggested for students planning to major in Drama. Open to all students by audition or permission of instructor. (Not available for P/F option.) Students may not receive credit for both DRAM 1350 and 1352.

DRAM 2100 Stage Makeup Design
Introductory course that studies the theory and practice of makeup design and application for the stage, including the creation of special effects.

DRAM 2310 Principles of Design
An introductory course that explores creativity through artistic composition and theatrical design. This overview course acquaints the student with design elements and techniques as non-verbal communication tools to express the creative imagination.

DRAM 2314 Principles of Stage Lighting
An introductory course that explores the use of light as an artistic medium in theatrical productions. This overview course acquaints the students with the equipment, design elements, and conceptual processes employed in lighting design.

DRAM 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 answers to the question: How can we discover the ways in which plays work?

DRAM 2340 Creative Thinking and the Artistic Process
This course encourages students to synthesize a theoretical and experiential approach to the creative process as studied through the visual arts, music, creative writing, and theatre. Students enter into the creative process as a means to develop creative self-expression, aesthetic sensibility, and an understanding of the arts. The nature and drive of artistic endeavor is explored through studies of the lives of significant thinkers and artists, examination 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, ENGL 2340, GNED 2340, and MUSC 2340.)

DRAM 2352 Acting II: Scene Study
This course will focus on scene work from a variety of periods and playwrights, and in class exercises to further develop the acting student's ability.
Prerequisites: DRAM 1350 or 1352 and at least Sophomore standing or consent of instructor.

DRAM 2354 Vocal Performance for the Actor
Provides fundamental concepts and techniques of vocal production, voice and diction, and vocal performance training. Various modes of body/voice exploration are employed. Voice and body work are developed through multiple performance opportunities that seek to increase the performer's vocal clarity, power, flexibility, and range. (Also listed as SPCH 2313).

DRAM 2356 Physical Theatre Laboratory
Drawing together movement, dance, text, mask, song, fact, fiction, and design, students will develop a creative vocabulary that will lay the foundation of a physical approach to theatre. By recalling the traditional popular theatre forms of commedia dell' arte and clowning, as well as mask performance and puppetry, the students will explore the creation of a performance that breaks the boundaries of individual

disciplines.

UPPER DIVISION

DRAM 3215 Design Project
Students design costumes, lights, or scenery that is actualized in a university mainstage production. Admission to course by consent of the Drama Faculty and Staff.

DRAM 3227 Stage Management Project
Provides the students with the opportunity to stage manage a university theatre production. Admission to course by consent of the Drama Faculty and Staff.

DRAM 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.

DRAM 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: DRAM 2310 or consent of instructor.

DRAM 3313 Scene Design
Rooted in the discipline of theatre, this course explores the art of conceptualization, visualization, and creativity. Problem solving activities include the use of metaphor to communicate literature for live performance, the creation of sculptural installations for plays and poetry, and the management of scenic design projects. The course examines the various means necessary to communicate a design to a producer, director, or client (sketching, drafting, painter elevations, and model making).
Prerequisite: DRAM 2310 or consent of instructor.

DRAM 3315 Theatrical Scene Painting
A study of color theory, scenic techniques, and painting styles introducing the student to the art of theatrical scene painting.

DRAM 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 theater, and computer control of mechanized scenery. The course will also explore the potential integration of these systems.
Prerequisite: DRAM 1320 or consent of instructor.

DRAM 3331 History of Theatre: The Classical Theatre to 1642
An examination of the history of theatre, covering Classical, Medieval, and early Renaissance theatre, including African and Asian forms during these periods, up to the closing of the theatres in England in 1642. The course will utilize historical and critical writings and iconography, as well as representative dramatic texts from each period.

DRAM 3332 History of Theatre: The Restoration to 1850
An examination of the history of theatre, from the Restoration period to the beginnings of realistic theatre in 1850, including African and Asian forms during these periods. The course will utilize historical and critical writings and iconography, as well as representative dramatic texts from each period.

DRAM 3335 Greek and Roman Drama
Study of trends in Greek and Roman dramatic literature, with attention to social, cultural, and political contexts. Topics will include the development of dramatic conventions and traditions of reception and performance. (Also listed as CLAS 3303 and ENGL 3322.)
Prerequisite: Sophomore standing or consent of instructor.

DRAM 3336 Modern Drama
Study of trends in dramatic literature from Realism to the present. (Also listed as ENGL 3320.)

DRAM 3337 Contemporary Drama
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. (Also listed as ENGL 3321.)

DRAM 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.
Prerequisites: DRAM 1350 or 1352 and 2332 or consent of instructor.

DRAM 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: DRAM 1350 or 1352 and 2352.

DRAM 3353 Advanced Acting: Non-Realistic Drama
Non-realistic Drama offers experience in acting scenes from non-realistic texts from nineteenth and twentieth-century European and American drama. Course includes exercises in voice, movement, and performance theory/art.
Prerequisites: DRAM 1350 or 1352 and 2352.

DRAM 3354 Stage Dialects

Students learn to use the International Phonetic Alphabet (IPA) as an effective tool for identifying individual sounds of speech. This knowledge improves articulation, contributes to the development of good Standard American Speech, and provides the actor with an ability to play a range of performance roles. The course employs the use of visual and audio technology as well as phonetics to analyze, create, and perform stage dialects.

DRAM 3355 Theater for Social Change
Theater for Social Change investigates the critical issues and creative process that chart the field of community-based theater. The critical investigation is framed by the following questions: What happens when theater gets into the community? How might we define "community"? Can theater stimulate political and social change? What is the role of the artist in relationship to the community? How can performance serve to raise consciousness? The collaborative creative process will primarily draw upon August Boal's work and will consist of learning exercises taken from the Image Theater, Invisible Theater, and Forum Theater. This is a participatory and hands-on course.

DRAM 3360 Playwriting
This course investigates and practices systematic methods for developing dramatic ideas and turning them into dramatic literature through readings, discussions, and exercises. Each student will, at the end of the semester, have written a one-act play.

DRAM 3-90 Directed Studies
Independent work under faculty supervision. The nature of the project will be agreed upon by the student and participating faculty member prior to registration. Credit may vary from 1 to 3 hours depending on the scope of the project. Maximum credit three hours.
Prerequisites: 15 hours in Drama, documentation of ability to undertake study, consent of instructor.

DRAM 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.

DRAM 3398 Honors Readings
Independent study in selected areas in preparation for Honors Thesis.
Prerequisite: Admission to Honors Program.

DRAM 4215 Design Project
Students design costumes, lights, or scenery which is actualized in a university mainstage production. Admission to course by consent of the Drama Faculty and Staff.

DRAM 4227 Stage Management Project
Provides the students with the opportunity to stage manage a university theatre production. Admission to course by consent of the Drama Faculty and Staff.

DRAM 4340 Directing II
Builds on the fundamentals studied in Directing I to explore further the process of directing for the theatre, from image to context to created word. Special attention will be paid to working with essential elements of the stage, and developing resources into a created space of interaction. Image, time, space, text, character, relationship, rhythm, sound, will all be addressed as means of creating theatrical environment. The course is taught through practical work and developed presentation of short dramatic pieces.
Prerequisite: DRAM 3340 or consent of instructor.

DRAM 4-85 The Drama Peer Tutor
Functioning as a peer mentor in introductory theatre courses, students will examine the philosophy, methods, and challenges of teaching theatre arts under the direction of the drama instructor for the course. Credit varies from 1 to 3 semester hours, depending on responsibilities and/or scope of the project. Course may be repeated for a maximum of 6 credit hours.
Prerequisite: 15 hours of Drama or consent of instructor.

DRAM 4-90 Directed Studies
Independent work under faculty supervision. The nature of the project will be agreed upon by the student and participating faculty member prior to registration. Credit may vary from 1 to 3 hours depending on the scope of the project. Maximum credit three hours.
Prerequisites: 15 hours in Drama, documentation of ability to undertake study, consent of instructor.

DRAM 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.

DRAM 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.

DRAM 4393 Capstone for Drama Majors
Drama majors with senior standing will create a portfolio of Drama coursework and production experiences, research career opportunities for the potential application of this portfolio, and present this synthesis to the Drama faculty, staff, and students. Applicable guidelines are available from Drama advisors. This course meets the Senior Experience requirement of the University's Common Curriculum.
Prerequisite: Senior status.

DRAM 4394 Seminar in Drama
An in-depth study of selected plays, dramatists, and/or movements. May be repeated when subject varies.
Prerequisite: Junior or Senior standing or consent of instructor.

DRAM 4-97 Theatre Internship
Supervised off-campus experience in theatre production and/or management appropriate to the student's specialty. Credit varies with responsibilities, but maximum is three credit hours.
Prerequisites: 12 semester hours of Drama coursework and consent of instructor.

DRAM 4398, 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. This course fulfills the Senior Experience requirement of the University's Common Curriculum.

URBAN STUDIES

RICHARD V. BUTLER, Ph.D., Professor, Economics
CHRISTINE DRENNON, Ph.D., Associate Professor, Sociology and Anthropology; Director
L. TUCKER GIBSON, Ph.D., Professor, Political Science
EUGENIO D. SUAREZ, Ph.D., Associate Professor, Business Administration
SHERYL R. TYNES, Ph.D., Professor, Sociology and Anthropology; Associate Vice President for Academic Affairs

Urban Studies is an interdisciplinary field that focuses on the global phenomenon of urbanization. The program incorporates a wide variety of disciplinary approaches to the study of cities around the world. Students may choose an Urban Studies major to explore the city from a diversity of perspectives, or to prepare for a career in one of the many fields that touch on urban life. Urban Studies majors have extensive interaction with the city in research, class projects, and internships.

THE MAJOR

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

I. The common curriculum

II. Specific degree requirements (33 semester hours total):

A. The Core Curriculum (6 semester hours)

URBS/SOCI 1310	The Urban Experience
URBS 3370	Applied Urban Studies

B. Methods Requirement (3 semester hours):

All urban studies majors must take **one** "methods" class from the following list. With the approval of their advisors, students will choose the course most appropriate to their own interests in the field.

BUSN 2301/ECON 2320 (Statistics for Management and Economics)
URBS/SOCI 3365 (Research Methods: GIS)
URBS/SOCI 3360 (Research Methods: Social Statistics)
SOCI 3353 (Research Methods: Fieldwork)
HIST 3381 (Historians and Their Craft)
GEOS 3308 (GIS and Remote Sensing)

C. Concentration Requirement (15 semester hours):

Students must complete 15 semester hours from one of the following concentrations:

The **Urban Design** concentration prepares students for graduate programs in urban planning, architecture and landscape architecture, and for careers in planning, building, and design.

The **Urban Environment** concentration is intended for students seeking an interdisciplinary approach to the environmental issues that arise in urban areas. It leads to graduate programs in environmental studies and public policy, and to careers in environmental analysis and policy.

The **Urban Issues and Policy** concentration prepares students for graduate programs in public policy, social work, and many of the social sciences, and for careers in non-profit organizations, education, government, and consulting.

The **Urban Management** concentration is intended for students who wish to pursue graduate study in public administration and careers in city governance and management.

Concentration Lists:

Urban Design:

Two of
ARTH 3352 (19th Century Architecture and Urbanism)
ARTH 3364 (20th Century Architecture and Urbanism)
ARTH 3365 (Contemporary Architecture)
GEOS 1304 (Environmental Geology)

Three of
ECON/URBS 3340 (Economics and the Environment)
ECON/URBS 3334 (Urban Economics)
HIST 3382/URBS 3305 (The City in History)
SOCI/URBS 3340 (Urban Geography)

Urban Environment:

Two of
ECON 3323 (The Economics of Government)
ECON/URBS 3330 (Economics and the Environment)
PLSI 3313 (Policy Analysis and the Policymaking Process)

Two of
BIOL 3434 (Ecology)
ENVI 4394 (Environmental Studies Capstone Experience)
GEOS 1304 (Environmental Geology)
GEOS 2304 (Earth Surfaces Processes)

One of
ANTH 2357 (Humans and the Environment)
HIST 3382/URBS 3305 (The City in History)
HIST 4360 (Environmental History)

Urban Issues and Policy:

Two of
HCAD 3350 (The U.S. Healthcare System)
SOCI 2314 (Social Problems and Human Values)
SOCI 3324 (Crime and Development)
SOCI/URBS 3340 (Urban Geography)

Two of
ECON 3323 (The Economics of Government)
ECON/URBS 3330 (Economics and the Environment)
ECON/URBS 3334 (Urban Economics)
PLSI 3313 (Policy Analysis and Policymaking)
PLSI 3316/URBS 3336 (Comparative Urban Governance)

The fifth course may be chosen from either list.

Urban Management:

ACCT 1301 (Financial Accounting)
ACCT 1302 (Managerial Accounting)
MGMT 2301 (Management of Organizations)

One of
ECON/URBS 3334 (Urban Economics)
PLSI 3316/URBS 3336 (Comparative Urban Governance)

One of
FNCE 3301 (Financial Administration of Business Firms)
HCAD 3383 (Management of Health Care Organizations)
MGMT 3371 (Human Resources Management)

D. Elective Requirement (6 semester hours):

In addition to the concentration requirements, urban studies majors must complete an additional 6 hours of courses chosen from any of the concentration or methods lists, or from the additional courses listed below.

FNCE 3351 (Financial Institutions and Markets)
GEOS 3411 (Hydrology)
PLSI 3314 (Bureaucratic Politics)
SOCI/URBS 1316 (Places and Regions in Global Context)
SOCI/URBS 2328 (Social Inequality)
SOCI/ANTH 3327 (Contemporary Minorities)
SOCI/URBS 3332 (Sociology of Health and Illness)
SOCI 3337 (Organizations: Private, Public and Popular)
SOCI 3339 (The Welfare State)
URBS 3-88 (Urban Studies Internship)
URBS 3-89 (Urban Studies Practicum)
URBS 3-90 (Independent Study)
URBS 4391 (Special Topics in Urban Studies)

A GIS course is strongly recommended for those intending to pursue graduate studies. Alternative courses may be substituted for the courses on the concentration, methods, and elective lists with the consent of the advisor.

D. Distribution Requirement:

No more than 12 of the hours used to satisfy the major requirements (including cross-listed courses) may come from any one department.

E. The Senior Experience (3 semester hours)

URBS 4394 (Senior Seminar)

III. Electives sufficient to total 124 semester hours.

THE MINOR

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

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

A. URBS/SOCI 1310 The Urban Experience

B. Urban Studies electives (15 semester hours) chosen from the Concentration, Methods, and Electives lists above.
C. Additional Requirements:

1. At least 9 hours of the total must be in upper-division courses.
2. No more than 12 of the hours used to satisfy the minor requirements (including cross-listed courses) may come from any one department.
3. At least 9 hours of the total must come from URBS courses (including cross-listed courses).
4. No more than 3 hours of URBS 3-88/3-89 may be used to meet the minor requirements.

COURSES

URBS 1310 The Urban Experience
An introduction to the city, its origins, contemporary form, and likely future. The course will present the city and urban phenomena in both the American context and other national environments. The major emphasis will be placed on understanding the physical, social, economic, and political systems that create and sustain urban areas. (Also listed as SOCI 1310.)

URBS 1316 Places and Regions in Global Context
A study of the complex ways in which modern social organization materializes geographically. Topics include the distribution and movement of human populations, characteristics and distribution of cultural mosaics, patterns of economic interdependence, and the forces of cooperation and conflict among peoples from both global and local perspectives. (Also listed as SOCI 1316.)

URBS 2328 Social Inequality
A study of the stratification of American society in terms of the unequal distribution of wealth, status, and power. Theories on the origin and development of social classes as well as of the functional necessity of social inequality will be examined along with empirical works dealing with inequality. (Also listed as SOCI 2328.)

URBS 3305 The City in History
Cross-cultural examination of urban life in the pre-industrial and industrial cities of Asia, Europe, and the Americas from a historical perspective with special emphasis on the U.S. urban experience. Lecture and discussion format. (Also listed as HIST 3382.)

URBS 3330 Economics and the Environment
The economic problem of coping with a finite environment. Study of the interrelationships among economic growth, environmental quality, urban concentration, and resource constraints. Economic analysis of pollution control and other environmental policy problems. (Also listed as ECON 3330.)
Prerequisite : ECON 1311.

URBS 3332 Sociology of Health and Illness
A study of the social and cultural definitions of health and illness, social sources of illness, social roles of the “sick,” the nature of the illness experience, and the structure of societal institutions that deal with health and illness. (Also listed as SOCI 3332.)

URBS 3334 Urban Economics
Analytical study of the reasons for cities to exist, the location of economic activity, the economic base of urban areas and the functioning of urban land markets. Economic analysis of selected urban policy issues such as local economic development, zoning and growth controls, housing, transportation, poverty, crime, and the provision of local public services. Attention is paid to the urban experience outside as well as within the U.S. (Also listed as ECON 3334)
Prerequisites: ECON 1311, and three hours of upper-division credit in either Urban Studies or Economics.

URBS 3336 Comparative Urban Governance
Cross-national analyses of the evolution of current functions and structures of city governments; bureaucratic power and other contemporary issues in urban governance; political parties and associations, interest groups, and citizen participation in urban politics; business and third sector involvement in urban governance; and recurring patterns in the political policy outputs of major institutions involved in urban governance. (Also listed as PLSI 3316.)
Prerequisites: PLSI 1301 or 1303 or consent of instructor.

URBS 3340 Urban Geography
This course examines the history and contemporary processes of urbanization, primarily in the North American context. In particular, we are concerned with the geography of these processes, resulting in differentiation of space and the creation of distinct places. We will examine the geography of urbanization at several scales, ranging from the development of the North American urban system to the experiences of neighborhoods within cities. (Also listed as SOCI 3340.)

URBS 3360 Research Methods: Applied Social Statistics
This course provides a hands-on approach for learning how to undertake quantitative social research focused on the design and completion of a semester-long research project. A variety of statistical tools are addressed, including descriptive statistics, tests of significance, 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 ANTH 3360 and SOCI 3360.)
Prerequisite: ANTH 3359 or SOCI 3359 or consent of instructor.

URBS 3365 Research Methods: GIS
This course provides a hands-on approach for learning how to undertake spatial social research focused on the design and completion of a

semester-long research project. Spatial tools introduced emphasize geographic information systems. The course goals include map making and the integration of information technology and cartography. (Also listed as ANTH 3365 and SOCI 3365.)
Prerequisite: ANTH 3359 or SOCI 3359 or consent of instructor.

URBS 3370 Applied Urban Studies
This course combines the academic study of Urban Studies with a service learning component; classroom work will be integrated with off-campus internships.
Prerequisites: URBS 1310 and Urban Studies major, or consent of instructor.

URBS 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. This 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 4394 Senior Seminar
Review of urban systems theory. Students will write and discuss papers on topics that involve synthesis of substantial portions of the urban system. They will have the opportunity to organize, integrate, and extend their knowledge of urban systems and urbanization. This course fulfills the Senior Experience requirement of the University's Common Curriculum.
Prerequisite: Senior standing.

WOMEN'S AND GENDER STUDIES

FACULTY ADVISORY COMMITTEE:

ROSANA BLANCO-CANO, Ph.D., Assistant Professor, Modern Languages and Literatures; Co-Chair
ANDREW KANIA, Ph.D., Assistant Professor, Philosophy
DEBRA OCHOA, Ph.D., Assistant Professor, Modern Languages and Literatures
BLADIMIR RUIZ, Ph.D., Associate Professor, Modern Languages and Literatures
CLAUDIA STOKES, Ph.D., Associate Professor, English
AMY L. STONE, Ph.D., Assistant Professor, Sociology and Anthropology
MARY ANN TÉTREAULT, Ph.D., Una Chapman Cox Distinguished Professor of International Affairs, Political Science
RITA E. URQUIJO-RUIZ, Ph.D., Assistant Professor, Modern Languages and Literatures; Co-Chair

The minor in Women's and Gender Studies is an interdisciplinary program that explores the cultural construction of gender and sexuality from a variety of academic perspectives. Classes investigate gender in relation to such topics as race and class; women's history and power; men's studies; and queer studies and theory.

Students interested in declaring a Women's and Gender Studies minor should contact the co-chairs of the Women's and Gender Studies Committee.

THE MINOR

The requirements for a minor in Women's and Gender Studies are as follows:

I. 19 semester hours consisting of at least one core course and courses from **at least two** of the categories listed under Supporting Courses: Humanities, Social Sciences, and Natural Sciences. Students may take up to three hours of Women's and Gender Studies Colloquia.

II. No more than 6 hours can overlap with a student's primary major.

III. No more than 6 hours can be taken from a single department listed below under Supporting Courses.

IV At least 9 hours must be upper-division courses.

WAGS 3122 (Women's and Gender Studies Internship) is strongly recommended for all WAGS minors.

COURSES

WAGS 2310 Introduction to Women's Studies
A feminist perspective on work, family, sexuality, identity formation, class stratification, racial and cultural diversity, and cultural representations of gender. Overview of the history of the women's movement and historical and contemporary debate among feminists.

WAGS 2350 Introduction to Feminist Theory
An introductory survey of feminist theory, both as an intellectual, philosophical tradition and as a program of political activism. At the discretion of the instructor, this course may entail a history of feminist theory; an engagement in specific debates or schools of criticism; and/or involvement in community activism.

WAGS 2351 Introduction to Queer Studies
An introduction to the interdisciplinary field of Queer Studies. Topics may include a historical survey of homosexuality and the Gay Rights movement; queer theory; psychoanalysis and psychology of sexuality; film and media studies; discussion of current events.

WAGS 2352 Introduction to Gender Studies
An introductory survey of the interdisciplinary field of gender studies. Topics may include masculinity and men's studies; feminism and the construction of femininity; sexuality; and queer theory.

WAGS 3-17 Gender Studies Colloquium
This course analyzes gender and sexuality by addressing topics organized under themes selected by participating faculty through class discussions, lectures, student presentations, and visiting speakers. Students may enroll in the colloquium no more than three times.

WAGS 3-18 Women's Studies Colloquium
The colloquium meets under direction of faculty of the Women's and Gender Studies Advisory Committee. Session topics are organized around themes selected by the Advisory Committee, to be explored through class discussions, faculty research, student presentations, and visiting lecturers. Students may enroll in the colloquium no more than three times.

WAGS 3-19 Queer Studies Colloquium
The Queer Studies Colloquium analyzes the variety of gender identities and representations, including lesbian, gay, bisexual, transgender, and transsexual topics. In addition, this course helps 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 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, 2352, or consent of instructor.

CORE COURSES

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 3347 Art of the Eighteenth Century
ARTH 3350 Neo-Classicalism to Realism
ARTH 3351 Impressionism and Post-Impressionism
ARTH 3392 Women's Studies in Art History
CHIN 3312 Chinese Cinema: A Historical and Cultural Perspective (also listed as ML&L 3303)
CLAS 1307 Gender and Identity in the Ancient World (also listed as HIST 1311)
CLAS 3303 Greek and Roman Drama (also listed as DRAM 3325 and ENGL 3322)
CLAS 3304 The Ancient Romance and Novel
COMM 3325 Special Topics in Communication Media: Women Journalists in Film and Novel
COMM 3325 Special Topics in Communication Media: Queer Theory and Mass Media
DRAM 3325 Greek and Roman Drama (also listed as CLAS 3303 and ENGL 3322)
ENGL 3322 Greek and Roman Drama (also listed as CLAS 3303 and DRAM 3325)
ENGL 3327 Contemporary Literature
ENGL 3337 Literary Theory
ENGL 3366 19th-Century British Fiction: The Marriage Market and the Money Market
ENGL 3371 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 4322 Studies in 19th-Century British Literature: Aesthete to Decadent: Literature of the 1890s
ENGL 4323 Studies in American Literature: The Harlem Renaissance
ENGL 4323 Studies in American Literature: Literature and Culture on the Latino/a Borderlands
ENGL 4323 Studies in American Literature: Sentimentalism: Nineteenth Century Literature and American Femininity
ENGL 4323 Studies in American Literature: The New Woman
ENGL 4323 Studies in American Literature: Queering the Nineteenth Century
ENGL 4325 Seminars in Literary Periods: The Woman Question in Victorian England
ENGL 4325 Seminars on Literary Periods: Modernism and Women
ENGL 4326 Seminars on Individual Authors: George Eliot and Virginia Woolf
ENGL 4326 Seminars on Individual Authors: Jane Austen
ENGL 4326 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*
GERM 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 3332 Culture and Society in Early Modern Europe
HIST 3363 Early American Social History
HIST 4400 Seminar in African History: Life Histories of African Women
ML&L 3303 Chinese Cinema: A Historical and Cultural Perspective (also listed as CHIN 3312)
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 3354 Philosophy and Gender
PLSI 1332 Film, Literature, and Politics of the Third World
RELI 3301 Gender and Religion
SPAN 4338 Spanish Women Writers
SPAN 4348 Spanish American Women Writers
SPAN 4349 Sexualities in Hispanic Literatures and Films
SPAN 4391 Special Topics: *Genero y memoria en el Cono Sur*
SPAN 4391 Special Topics: Chicana Feminisms
SPCH 4391 Special Topics in Public Communication: Rhetoric of the Women's Movement

Social Sciences

ANTH 3329 Sexuality and Society (also listed as SOCI 3329)
ANTH 3331 Language, Culture and Society (also listed as SOCI 3331)
ANTH 3358 The Anthropology of International Relations
COMM 3325 Special Topics in Communication Media: Gays and Lesbians in Popular Culture
COMM 3325 Special Topics in Communication Media: Popular Culture, Gender, and Communication
PLSI 3347 Gender and International Relations
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 2313 Social Movements
SOCI 3329 Sexuality and Society (also listed as ANTH 3329)
SOCI 3331 Language, Culture and Society (also listed as ANTH 3331)
SOCI 3332 Sociology of Health and Illness (also listed as URBS 3332)
SOCI 4352 Mind, Body and Society: Seminar
URBS 3332 Sociology of Health and Illness (also listed as SOCI 3332)

Natural Sciences

WAGS 3-75 Science, Gender, and Sexuality

Colloquia

WAGS 3-17 Gender Studies Colloquium
WAGS 3-18 Women's Studies Colloquium
WAGS 3-19 Queer Studies Colloquium

Note: Special topics courses are approved by the advisory committee only for the specific topic listed.