- JOUR 5040, Media Studies and Theories
- JOUR 5050, Readings in Mass Communication
- JOUR 5250, Research Methods I (Quantitative)
- JOUR 5260, Research Methods II (Qualitative)
- JOUR 5950, Master's Thesis (6 hours)


## Master of Journalism

The MJ candidate whose undergraduate degree is not in journalism may be required to take up to 12 hours of undergraduate courses in journalism as approved by the graduate program director. The MJ degree has no foreign language requirement, and the 6 -hour thesis is optional, but the candidate must complete a minimum of 36 hours of graduate work. A minor of at least 6 hours in another field is required. If as many as 12 hours of minor work are done, they may be divided equally between two approved fields.

JOUR 5040, Media Studies and Theories, must be taken in the first term/semester of study in the journalism graduate program.

Required journalism courses for the MJ follow.

- JOUR 5040, Media Studies and Theories
- JOUR 5050, Readings in Mass Communication
- JOUR 5250, Research Methods I (Quantitative)
- JOUR 5260, Research Methods II (Qualitative)


## Minor Fields

Recommended minor fields for the MJ are English, history, information science, political science, radio/television/film, sociology, economics and business administration. A minor is optional for the MA.

## Graduate Academic Certificate

## Religion in Media and Culture

The Mayborn Graduate Institute of Journalism offers a graduate academic certificate titled religion in media and culture. This program consists of a focus of study examining religion and spirituality as it is expressed and perceived within culture and society generally and through mass-mediated communication specifically. The certification requires 15 hours of course work drawing from journalism and assigned readings in religious studies and the sociology of religion.

## Admission Requirements (including prerequisites or degree)

Graduate standing; demonstrate competency in reporting (or may take JOUR 5010 as a prerequisite).

## Course Requirements

- JOUR 5200, Public Opinion and Propaganda
- JOUR 5310, Media Ethics
- JOUR 5360, Religion Journalism
- JOUR 5380, Religion in Media and Culture
- JOUR 5900, Advanced Problems in Journalism (assigned readings in religion and society)


## NT Daily

The award winning North Texas Daily, UNT's student newspaper, provides practical experience for students in all sequences of the Department of Journalism. The Student Publications Committee selects the editor each term/semester, and staff jobs are open to any UNT student. The Daily is published four days a week in the fall and spring terms/semesters and once a week in the summer. The Daily has been providing news and entertainment to UNT students since 1948. For more information, contact the Daily's adviser at (940) 565-2205, or visit the Daily's web site (www.ntdaily.com).

## Courses of Instruction

All Courses of Instruction are located in one section at the back of this catalog.

## Course and Subject Guide

The "Course and Subject Guide," found in the Courses of Instruction section of this book, serves as a table of contents and provides quick access to subject areas and prefixes.

# Department of Mathematics 

Main Departmental Office
General Academic Building, 435
P.O. Box 311430

Denton, TX 76203-1430
(940) 565-2155

Fax: (940) 565-4805
Web site: www.math.unt.edu

## Neal Brand, Chair

Graduate Faculty: Allaart, Allen, Anghel, Bator, Betelu, Brand, Brozovic, Cherry, Clark, Conley, Douglass, Gao, Iaia, Jackson, Johnson, Kallman, Kung, Lewis, Liu, Mauldin, Monticino, Neuberger, Quintanilla, Richter, Sari, Shepler, Urbanski, Zamboni.

Opportunities for supervised research are available in a variety of areas involving pure and applied mathematics.

Students who graduate with degrees in mathematics are flexible and adaptable in the workplace
and readily obtain jobs with high-technology companies and in business, industry, government and education. Salaries and working conditions are comparable with those of engineers and computer scientists.

## Research

Faculty and students actively pursue both basic and applied research in mathematics from traditional areas of algebra, analysis, topology, probability and foundations to new and applied topics such as chaos theory, dynamical systems, image processing and stochastic differential equations.

Faculty research is supported by federal and private grants. Many of these grants provide research support for graduate students.

The library collection in the mathematical sciences is one of the nation's finest, with more than 18,000 volumes, and many are available electronically. Students and faculty have access to library resources via Internet from their offices.

## Scholarships and Financial Support

Graduate students usually support their study by working as teaching fellows for the department. Teaching fellows are paid competitive stipends.

Work also is available as teaching assistants and math lab tutors, and the department has funds available for research assistants.

Contact the graduate adviser for complete details and for information about financial support.

## Admission Requirements

Application for admission to the Toulouse School of Graduate Studies is made through the office of the dean of the School of Graduate Studies. The applicant should have the equivalent of an undergraduate major in mathematics at this institution. Deficiencies in this respect will be evaluated and must be remedied as a condition of final admission. An acceptable score on the GRE or GMAT is required. Contact the department or the Toulouse School of Graduate Studies concerning information about standardized admission test requirements.

## Degree Programs

The Department of Mathematics offers graduate programs leading to the following degrees:

- Master of Science,
- Master of Arts, and
- Doctor of Philosophy, all with a major in mathematics.
All graduate students will consult with the graduate adviser regarding a program of study. Graduate students are evaluated annually regarding progress
toward graduation. Those not making satisfactory progress will be dropped from the mathematics program. Appeals for reinstatement may be made to the department's graduate affairs committee.


## Master of Arts

The Master of Arts degree with a major in mathematics is designed primarily for those students who plan to pursue the PhD degree and who plan careers in college teaching, business or industry. The program consists of 24 hours of approved course work (numbered 5000 or above) and a thesis carrying 6 hours of credit. A student in this program normally will take five of these six courses: MATH 5310, 5320, $5520,5530,5610$ and 5620. A minor of 6 semester hours may be elected by the student with consent of the department. A final oral examination is scheduled after completion of the thesis.

Candidates for the MA degree must demonstrate proficiency in a foreign language (normally French, German, Spanish or Russian). See the Admission section of this catalog for further details.

## Master of Science

The Master of Science degree with a major in mathematics is designed for those students who wish to develop a high level of competence in mathematical theory and technique in order to apply this knowledge in fields outside mathematics. The program consists of 36 hours of approved course work, possibly including a minor of up to 9 hours in a field outside mathematics. The student normally will take five of these six courses: MATH 5310, 5320, $5520,5530,5610$ and 5620.

Candidates must demonstrate a proficiency in computer programming equivalent to that acquired in a 6 -hour introductory course. A final examination normally will be scheduled during the final term/semester of the student's course work. A thesis is optional.

## Doctor of Philosophy

The Doctor of Philosophy degree is awarded for superior accomplishment, the attainment of a high level of scholarship and the demonstrated ability, through independent study and research, to carry out an original investigation and present the results of such investigation.

## Course Requirements

Until the student has selected a major professor, the graduate adviser will assist in planning the doctoral program. The program will be designed to provide the student with competence in several major areas of mathematics and to provide for intensive study and research in the area of specialization. The
student will be expected to complete approximately 90 hours of graduate work in mathematics beyond the bachelor's degree, of which about half should be in courses numbered above 6000. Included in this work, the student will be expected to take (or previously have taken the equivalent of) the following core sequences: MATH 5310-5320, 5410-5420, 5520-5530 and 5610-5620. In addition, the student is required to take at least two 6000-level courses in each of the areas of algebra, analysis and topology.

## Foreign Language Requirement

PhD candidates must demonstrate proficiency in a foreign language approved by the department (normally chosen from French, German, Spanish and Russian). See the Doctoral Degree Requirements section of this catalog for additional information.

## Qualifying Examinations

Before enrolling in the dissertation seminar, the student must pass qualifying examinations over two areas chosen from algebra, topology, real analysis and complex analysis. The doctoral advisory committee is appointed upon successful completion of the qualifying examinations.

## Dissertation and Final Examination

The candidate must submit a dissertation exhibiting independent research on a topic approved by the doctoral committee. After the completion of the dissertation, a final comprehensive oral examination that will be primarily a defense of the dissertation will be given.

## Courses of Instruction

All Courses of Instruction are located in one section at the back of this catalog.

## Course and Subject Guide

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# Department of Philosophy and Religion Studies 

Main Departmental Office<br>Environmental Education, Science and Technology<br>Building, 225<br>P.O. Box 310920<br>Denton, TX 76203-0920<br>(940) 565-2266

Web site: www.phil.unt.edu
E-mail: philosophy@unt.edu

## Robert Frodeman, Chair

Graduate Faculty: Barnhart, Callicott, Frodeman, Gunter, Hargrove, James, Kaplan, Klaver, Rozzi, Yaffe.

The Department of Philosophy and Religion Studies is the leading graduate program nationally and internationally in environmental ethics and environmental philosophy. The department offers the following degrees:

- Master of Arts with a major in philosophy
- Doctor of Philosophy with a major in philosophy.

The master's degree is appropriate for students wishing to develop master's-level expertise in philosophy before pursuing doctoral studies in philosophy or related fields. It also provides an excellent background for students planning careers in law. A non-thesis option is available for students pursuing non-academic career opportunities. Because this option can be completed in slightly more than a year, it provides professionals with the opportunity to develop expertise in philosophy during one-year leaves of absence from their jobs.

Graduate courses in philosophy may also be taken as part of the Master of Science in Interdisciplinary Studies through the Center for Interdisciplinary Graduate Studies of the Toulouse School of Graduate Studies. This program permits students, in close consultation with a faculty adviser, to create their own degree plans, which involve study in three or more related areas. This degree can be completed in one year including summer.

Because of its high concentration of specialists in the field of environmental ethics, the department offers humanists, scientists and professionals unique opportunities for postdoctoral work and professional development either through independent study and research or organized course work.

Philosophy courses also may be taken as a minor on the master's degree in other disciplines and as a

