

ENGLISH MA**(options: Literature, Technical Communication, Teaching English as a Second Language)****ENGLISH EDUCATION MS****(discipline-based)****CREATIVE WRITING MFA**

College of Arts & Humanities
Department of English
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Chair: Donald F. Larsson, Ph.D.
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John Banschbach, Ph.D.; Suzanne Bunkers, Ph.D.; Donna Casella, Ph.D.; Terry Davis, MFA; William Dyer, Ph.D.; Tina Edstam, Ph.D.; Terrance Flaherty, Ph.D.; Gwen Griffin, Ph.D.; Kathleen Hurley, Ph.D.; Mary Susan Johnston, Ph.D.; Donald Larsson, Ph.D.; Nancy Mackenzie, DA; Randall McClure, Ph.D.; JoAnna Mink, DA; Roland Nord, DA; Anne O'Meara, Ph.D.; Dave Popowski, Ph.D.; Kay Puttock, Ph.D.; Richard Robbins, MFA; Roger Sheffer, DA; Harry Solo, Ph.D.; Stephen Stoyhoff, Ph.D.; Richard Terrill, MFA; Lee Tesdell, Ph.D.

English at Minnesota State University offers five graduate programs; each is designed to meet the needs of a particular audience, so each has its own entrance requirements, curriculum, reading list, comprehensive examination format, and thesis/alternate plan requirements. It is important that prospective students discuss which program best meets their needs with the department chair, the department director of graduate study, or the individual program director. Students may begin work any semester in any of the programs, except in the MFA in Creative Writing, which admits each Fall.

Graduate Assistantships. Graduate teaching assistantships are available during the academic year to full-time students. Assistants receive about \$8,000 over two semesters and full tuition remission for up to 18 credits. For more information, contact the Department of English.

ENGLISH MA**LITERATURE OPTION**

Contact: Dr. Mary Susan Johnston
 (Thesis Plan - 30 credits)

Students choosing this option will find the degree appropriate preparation for doctoral work in English, for community college and private school teaching, and for entrance into advanced professional programs of study. In addition, this program develops skills of organization; written, oral, and electronic communication; and analytical and critical thinking that are valued by employers in a wide range of fields in business, government, and non-profit organizations.

Entrance requirements include a minimum of 30 undergraduate semester credit hours earned in language, literature, or related courses. Twenty credits should have been earned in upper-division courses. It is highly recommended that candidates have three credits in a major figure and an upper-level linguistics course. Students may be granted provisional admission with deficiencies. Candidates whose native language is not English must have a TOEFL score of 550 or above. The GRE is not required for this program.

Successful applicants who have not taken an upper-division theory/criticism class before entering are required to take a graduate-level theory course such as the Literary Criticism or Film Criticism as part of their program.

Literature/Film/Theory (15 credits)

- ENG 650 Bibliography and Research in Literature (3)
 Choose four courses from the following:
 ENG 603 Seminar: Selected Authors (3)
 ENG 605 Seminar: Shakespeare (3)
 ENG 608 Seminar: British Literature to 1800 (3)
 ENG 609 Seminar: British Literature after 1800 (3)
 ENG 610 Seminar: American Literature to 1865 (3)
 ENG 611 Seminar: American Literature after 1865 (3)
 ENG 612 Seminar: Women in Literature (3)
 ENG 635 Seminar: World Literature (3)

Electives (11-12 credits)

Choose any of 5/600 level English courses, selected in consultation with an advisor.

Thesis

ENG 699 Thesis (3-4)

Additional Requirements:

All courses in the student's master's program must be in English with the exception of courses specifically approved by the literature faculty and the Graduate Committee in English. Of the 30 credits required for the master's degree, 15 must be at the 600 level. Students must take comprehensive examinations at the end of their program and orally defend the thesis. By the end of the program, the student is expected to demonstrate reading knowledge of a modern language by coursework or by examination. Two years of a modern language is generally sufficient to satisfy this requirement.

TECHNICAL COMMUNICATION OPTION

Contact: Dr. Nancy MacKenzie
 (Thesis Plan - 30 credits)
 (Alternate Paper Plan - 34 credits)

Students choosing this option will find the degree prepares them to be professional information developers, technical writers, and editors who are skilled at using the written and spoken word, along with visuals, to effectively inform and instruct a wide range of audiences.

Entrance requirements include at least 18 semester hours in one or more of the following areas: literature, linguistics, speech communication, or mass communications. Candidates whose native language is not English must have a TOEFL score of 550 or above. The GRE is not required for this program.

Technical Communication (20 credits)

- ENG 575 Editing Technical Publications (4)
 ENG 577 Technical Documentation, Policies and Procedures (4)
 ENG 673 Research and Theory for Technical Communicators (3)
 ENG 678 Technical and Scientific Prose (3)
 ENG 679 Topics in Technical Communication (3)
 ENG 680 Topics in Computer-Assisted Writing (3)

Electives (3-10 credits)

Choose any 5/600 level English or related course, selected in consultation with an advisor.

Internship (3)

ENG 698 Internship (3)

Thesis or Alternate Plan Paper (1-4)

ENG 699 Thesis (3-4)
 ENG 694 Alternate Plan Paper (1-2)

Additional Requirements:

The degree requires that 50% of all coursework must be taken at the 600 level. Students also must demonstrate reading knowledge of a modern language or demonstrated competence in a computer programming language, and take a two-part written examination reflecting command of both theory and practical application. An oral defense is required of thesis writers.

TEACHING ENGLISH AS A SECOND LANGUAGE (TESL) OPTION

Contact: Dr. Stephen Stoyhoff
 (Thesis Plan - 30 credits)
 (Alternate Plan Paper - 34 credits)

Students choosing this option will find the degree appropriate preparation for teaching English as a second/foreign language, program administration, curriculum consulting, and publishing and materials development. It is designed for both native and non-native speakers of English.

To enter the program, students must have an undergraduate major or minor in a relevant field (for example, English, linguistics, or a modern language other than English). Candidates in the TESL track who are native speakers of English must have a minimum of two years of a foreign language at the college level. This language requirement for native speakers may be met in residence, but courses taken to fulfill the language requirement will not count toward the degree. Candidates whose native language is not English must have a TOEFL score of 550. The GRE is not required for this program.

This is an interdisciplinary program with required coursework in both English and Modern Languages. It is also possible to earn certification in teaching English as a second language in grades K-12. For Master's candidates with an undergraduate

ENGLISH

licensure degree, the MA in TESL includes most of the courses needed for TESL certification. See the Department of Modern Languages for details.

Alternate Plan Paper Option (34 credits)

Required TESL Courses (24 credits)

MODL 570 Theories and Methods of TESL I (4)
MODL 571 Theories and Methods of TESL II (4)
ENG 582 English Structure/Pedagogical Grammar I (3)
ENG 627 Research Seminar in TESL (3)
ENG 629 Second Language Literacy Development (3)
ENG 686 Second Language Testing (3)
ENG 689 Studies in English Linguistics (3) **OR**
ENG 630 History of English (3)

Linguistics and TESL Courses (10 credits)

Choose 3 courses from the following (at least one from the Linguistics list and one from the TESL list):

Linguistics Courses:

ENG 583 English Structure/Pedagogical Grammar II (4)
ENG 623 Language and the Teaching of English (3)
ENG 630 History of English (3)
ENG 682 English Grammar and Discourse (3)
ENG 684 Sociolinguistics (3)
ENG 689 Studies in English Linguistics (3)

TESL courses:

ENG 585 Language and Culture in TESL (4)
ENG 631 Language Planning and Language Policy (3)
ENG 633 Second Language Acquisition (3)
ENG 634 Topics in TESL (3)
ENG 685 Materials for TESL (3)

Alternate Plan Paper: Completed as part of ENG 627

Thesis Option (30 credits)

Required TESL courses (24 credits, see above)

Linguistics and TESL Courses (3 credits)

Choose one course from Linguistics and TESL courses above.

Thesis (3 credits)

ENG 699 Thesis (3)

Additional requirements:

The degree requires that 50% of all coursework be taken at the 600 level. Students must also pass a comprehensive examination based on coursework and a reading list. An oral presentation of the thesis will normally be required as well.

ENGLISH EDUCATION MS

(DISCIPLINE-BASED)

Contact: John Banschbach
(Thesis Plan - 30 credits)

(Alternate Plan Paper - 34 credits)

The MS in English Education is designed for teachers of English language arts, curriculum directors, and department chairpersons. This program combines formal study of language, composition, literature, and professional education with individual reading and research. In the program, teachers and administrators develop a course of study appropriate to their individual professional goals.

Teaching licensure in the language arts is a prerequisite for this degree. This degree does not lead to initial teaching licensure. Students who desire initial licensure should consult the Master of Arts in Teaching (MAT) program. An MAT with an emphasis in English is available. Please see the section concerning the MAT program listed in this bulletin.

Coursework for the degree includes 3 semester credits in Professional Education in addition to EDFN 600. Please consult the general description of the Master of Science Degree at the beginning of the Graduate Bulletin for a list of courses in Professional Education that may be used.

Research (3 credits)

ENG 600 Introduction to Educational Research

Linguistics (3-4 credits)

ENG 581 History of the English Language (4)
ENG 582 English Structure/Pedagogical Grammar I (4)
ENG 585 Language and Culture in TESL (4)
ENG 623 Language and the Teaching of English (3)
ENG 631 Language Planning and Language Policy (3)

ENG 632 Bilingualism and Second Language Contact (3)
ENG 633 Second Language Acquisition (3)
ENG 682 English Grammar and Discourse (3)
ENG 684 Sociolinguistics (3)
ENG 687 Theory and Practice of Translation (3)
ENG 689 Studies in English Linguistics (3)

Literature Methodology (2-4 credits)

ENG 525 Topics in Children's Literature (2-4)
ENG 563 Adolescent Literature (2)
ENG 564 Teaching Literature in the Middle School (3)
ENG 661 Topics in Children's and Young Adult Literature (3)

Other coursework in English (7-16)

Graduate-level courses focused on teaching English include, but are not limited to, the following list: Children's Fantasy, Composition Theory, Workshop for Teaching Assistants, Teaching Creative Writing, Writing for Children, Teaching Writing, topics in Computer-Assisted Writing, Language and the Teaching of English, English and the Profile of Learning, and Children's Literature in Britain (a three-week course conducted in England).

Each semester the Department of English offers several other graduate-level courses in language study, creative writing, and British, American and World Literature. Most of these can be taken as part of a student's regular program.

Professional Education (3 credits)

Choose any 5/600 level Professional Education course (in addition to EDFN 600) in consultation with an advisor.

Related Study (6 credits)

Choose any 5/600 level related course outside of English and Professional Education.

Research Project (1-4 credits)

ENG 694 Alternate Plan Paper (1-2) **OR**
ENG 699 Thesis (3-4)

Additional Requirements:

The degree requires that 50% of all coursework be taken at the 600 level. Students must take a three-part written examination on issues in English education, education, and the student's chosen specialty.

CREATIVE WRITING MFA

Contact: Richard Robbins, MFA
(Thesis Plan - 48 credits)

The MFA program in Creative Writing meets the needs of students who want to strike a balance between the development of individual creative talent and the close study of literature and language. Candidates in the program will find it appropriate training for careers in freelance writing, college-level teaching, editing and publishing, arts administration, and several other areas.

Admission. Application Deadline: February 1. Applicants must submit a writing portfolio (10 pages of poetry or 20 pages of prose) and a 1-2 page personal statement directly to the Department of English, Creative Writing Program. To enter the program without deficiency, candidates must have the equivalent of at least a minor in English (18 semester credits in language, literature, linguistics). Students who enter with a small number of deficiencies may be allowed to make them up within their graduate program. Candidates whose native language is not English must have a TOEFL score of 550 or above. The GRE is not required for this program.

Research (2 credits)

ENG 672 Research and Publication in Creative Writing (2)

Writing Seminars/Workshops (minimum 12 credits)

Choose 12 credits from the following:
ENG 542 Advanced Prose Nonfiction Writing (4)
ENG 543 Advanced Fiction Writing (4)
ENG 544 Advanced Poetry Writing (4)
ENG 546 Screenwriting (4)
ENG 594 English Workshop (4)
ENG 642 Seminar: Prose Nonfiction Writing (3)
ENG 643 Seminar: Fiction Writing (3)
ENG 644 Seminar: Poetry Writing (3)
ENG 649 Topics in Creative Writing (1-3)

Form and Technique (6 credits)

ENG 696 Form & Technique in Prose (3)
ENG 697 Form & Technique in Poetry (3)

Contemporary Genres (6 credits)

ENG 646 Contemporary Prose (3)
ENG 647 Contemporary Poetry (3)

Career Related (6 credits)

Choose 6 credits from the following:

ENG 516 Film Criticism (4)
ENG 541 Literary Criticism (4)
ENG 545 Advanced Critical Writing (4)
ENG 574 Research and Writing Technical Reports (4)
ENG 575 Editing Technical Publications (4)
ENG 577 Technical Documentation, Policies, and Procedures (4)
ENG 625 College Composition Theory (3)
ENG 649 Topics in Creative Writing (1-3)
ENG 680 Topics in Computer-Assisted Writing (3)
ENG 687 Theory and Practice of Translation (3)
ENG 690 Workshop for Teaching Assistants (1)
ENG 693 Introductory Workshop for Teaching Assistants (2)
ENG 698 Internship (1-8)

Electives (maximum of 12 credits)

Choose any three 600 level literature courses selected in consultation with an advisor.

Thesis

ENG 699 Thesis (4)

Additional Requirements:

All courses must be in English with the exception of those specifically approved by the Graduate Committee in English; 60% of all coursework must be taken at the 600 level. Students must take a two-part written examination based on a reading list. Students also are required to present a reading/oral defense as part of their thesis project, a book-length collection of writing in the student's chosen genre.

COURSE DESCRIPTIONS**ENG 500 (4) Chaucer**

Readings in the major works of Chaucer, including *The Canterbury Tales* and *Troilus and Criseyde*.

ENG 501 (4) Milton

Study of Milton's development as a poet and prose writer, from his minor poetry to *Paradise Lost*, *Paradise Regained*, *Samson Agonistes*, *Areopagitica*, and selections from *On Christian Doctrine*.

ENG 503 (2-4) Selected Authors

Content changes. May be repeated.

ENG 516 (4) Film Criticism

Trends in film theory and criticism. Practice in critical analysis.

ENG 525 (2-4) Topics in Children's Literature

Topics in genres such as fantasy and historical fiction and thematic topics such as survival or journeys. May be repeated with different subject matter.

ENG 526 (2-4) Selected Periods

Selected periods of literary study.

ENG 532 (2-4) Selected Studies: Novel

Content changes. May be repeated.

ENG 535 (2-4) The World Novel

A study of selected novels from a variety of time periods and cultures, including Eastern and Western Europe, Asia, Africa, and Latin America.

ENG 541 (4) Literary Criticism

Theories of literature and its production and use.

ENG 542 (4) Advanced Prose/Non-Fiction Writing

Advanced workshop in writing personal essays and literary journalism.
Prerequisite: writing course or consent of instructor

ENG 543 (4) Advanced Fiction Writing

An advanced course in writing short stories and novels.
Prerequisite: writing course or consent of instructor

ENG 544 (4) Advanced Poetry Writing

An advanced course in writing poems.
Prerequisite: writing course or consent of instructor

ENG 545 (4) Advanced Critical Writing

An advanced course in writing critical essays.
Prerequisite: writing course or consent of instructor

ENG 546 (4) Screenwriting

Introduction to writing for the screen
Prerequisite: writing course or consent of instructor

ENG 563 (2) Adolescent Literature

Motivation and interests of and materials for adolescent readers.

ENG 564 (3) Teaching Literature in Middle School

Survey of books suitable for the Middle School classroom, covering a variety of topics and genres.

ENG 571 (4) Visual Technical Communication

Analysis and training focused on concepts and practices of visual design as they relate to technical and professional communication.

ENG 572 (4) Topics in Technical Communication

Topics in theory and practice of technical communication. Hands-on course which implements the theories discussed. May be repeated with different subject matter.

ENG 573 (4) Desktop Publishing

Overview of publishing and typography, conventions of desktop publishing, and hardware and software application tools for desktop publishing. Students need not have prior experience with DTP, but some word processing and microcomputer experience will be helpful. Course will meet in both PC and Macintosh labs.

ENG 574 (4) Research and Writing Technical Reports

Practice in writing various types of reports for a variety of purposes and audiences. Includes study of primary and secondary research methods.
Prerequisite: Eng 271 or equivalent

ENG 575 (4) Editing Technical Publications

Editing the content, organization, format, style, and mechanics of documents; managing the production cycle of documents, and discovering and learning microcomputer and software applications for technical editing tasks.

ENG 576 (4) Online Documentation

Introduction to the conventions and strategies for publishing on-line documentation and for managing on-line documentation projects. Topics include analyzing users and tasks, designing and writing documents to be published on-line, testing on-line documents, and managing on-line documentation projects.

ENG 577 (4) Technical Documentation, Policies, & Procedures

Creating both on-line and hard copy documentation for products, with emphasis on computer software and hardware documentation for users. Attention also to policies and procedures as written for a range of uses, e.g. employee handbooks, manufacturing processes, and usability testing.

ENG 581 (3) History of English Language

The development of English from its origins as a dialect of Proto-Indo-European to its current form, with consideration of its social history as well as its formal development.

ENG 582 (4) English Structure and Pedagogical Grammar I

The English sound system and English sentence structure studied for the purpose of discovering how they can be taught to students of English as a second or foreign language.

ENG 583 (4) English Structure and Pedagogical Grammar II

The English sound system and English sentence structure, and content-based language instruction.

ENG 585 (4) Language and Culture in TESL

A consideration of the cultural issues encountered by teachers of English as a second or foreign language in the U.S. and abroad.

ENG 592 (2-4) Selected Topics

Topics in literary study. May be repeated with change of topic.

ENG 594 (1-6) English Workshop

Specialized workshops in topics such as computer-assisted writing, teaching the writing of poetry in the secondary school, or discipline specific writing.

ENG 595 (1-4) Special Studies

Specialized, in-depth study of topics such as Holocaust literature, environmental literature, or regional literature.

ENG 603 (3) Sem: Selected Authors

Studies in selected authors in British, American, Multicultural, or World Literature. May be repeated with different subject matter.

ENG 605 (3) Sem: Shakespeare

Study of works of Shakespeare, including comedies, histories, tragedies, tragic-comedies, and some shorter poetic works, including sonnets.

ENG 608 (3) Sem: British Literature to 1800

Studies in topics/periods in British Literature to 1800. Emphasizes close readings of primary works, analysis of pertinent secondary works, detailed class discussion, and analytical writing. May be repeated with different subject matter.

ENG 609 (3) Sem: British Literature after 1800

Studies in topics/periods in British Literature after 1800. Emphasizes close readings of primary works, analyzing pertinent secondary works, detailed class discussion, and analytical writing. May be repeated with different subject matter.

ENG 610 (3) Sem: American Literature to 1865

Analysis of topics/periods in American Literature before 1865. Emphasizes close reading of primary works, analysis of pertinent secondary works, detailed class discussion, and analytical writing. May be repeated with different subject matter.

ENG 611 (3) Sem: American Literature after 1865

Analysis of topics/periods in modern and contemporary American Literature, i.e. fiction, nonfiction, poetry, and drama. Emphasizes close reading of primary works, analysis of pertinent secondary works, detailed class discussion, and analytical writing. May be repeated with different subject matter.

ENG 612 (3) Sem: Women in Literature

Study of selected works by women writers up through the twentieth century with attention to their works within cultural contexts. May be repeated with different subject matter.

ENG 623 (3) Language & Teaching of English

Study of language issues for teachers of English. Intended for those teaching in "mainstream" classrooms populated by a majority of native speakers of English as well as those teaching English as a second or foreign language.

ENG 625 (3) College Composition Theory

Introduction to the major theories of the nature of composition and their pedagogical application.

ENG 626 (3) Bibliography & Research in TESL

Introduction to the types and principles of research in teaching English as a second or foreign language. Intended as an introduction to graduate study in the field and an orientation to the MA in TESL.

ENG 627 (3) Research Seminar in TESL

Critique/work group for class member's alternate plan paper's and master's thesis goals. Provides students with an opportunity to be immersed in the research process and to select, organize, analyze, evaluate, and record information.

ENG 629 (3) Second Language Literacy Development

Study of literacy from a socioliterate perspective. Intended to promote acquisition of multiple literacies.

ENG 630 (2-3) Studies in Language & Literature

Topics in a broad range of English studies. May be repeated with different subject matter.

ENG 631 (3) Language Planning/Policy

Study of governmental efforts to influence or regulate language use, viewed from a world-wide perspective.

ENG 632 (3) Bilingualism/2nd Language Contact

Study of the social environments where more than one language is spoken and the effects upon individuals of living in such environments.

ENG 633 (3) Second Language Acquisition

Study of how languages other than one's mother tongue are learned.

ENG 634 (3) Topics in TESL

Topics in the area of teaching English as a second language. May be repeated with a different subject matter.

ENG 635 (3) Sem: World Literature

Studies in selected national literature or in topics/periods of world literature. May be repeated with different subject matter.

ENG 640 (3) Form and Technique in Prose

Study of the underpinnings of fictional and non-fictional genres.

ENG 641 (3) Form and Technique in Poetry

Study of the technical underpinnings of poetry.

ENG 642 (3) Sem: Prose Non-Fiction Writing

Workshop in writing personal essays and literary journalism. Prerequisite: consent of instructor for non-MFA in creative writing students

ENG 643 (3) Sem: Fiction Writing

Workshop in fiction writing.

Prerequisite: consent of instructor for non-MFA in creative writing students

ENG 644 (3) Seminar: Poetry Writing

Workshop in poetry writing.

Prerequisite: consent of instructor for non-MFA in creative writing students

ENG 646 (3) Contemporary Prose

Study and analysis of selected works in fiction and nonfiction since 1945.

ENG 647 (3) Contemporary Poetry

Study and analysis of poetry since 1945.

ENG 649 (1-3) Topics in Creative Writing

Topics relating to creative writing. May be repeated with different subject matter.

ENG 650 (3) Bibliography & Research in Literature

Cornerstone course of the Main Literature program, providing the research and critical tools to enable students to develop a concrete focus for the thesis.

ENG 661 (2-3) Topics in Children's & Young Adult Literature

Topics of interest to the teacher or professional working in the field of children's and young adult literature. May be repeated with different subject matter.

ENG 662 (2-3) Topics in English Education

Topics such as writing assessment, teaching poetry, and teaching writing in the secondary schools. May be repeated with different subject matter.

ENG 670 (1-3) Independent Writing

Individualized study in writing. (Creative writing majors may take up to 3 credits total.)

ENG 672 (2) Research & Publication in Creative Writing

Exploration of the business of creative writing and the tools for writing and research in the field.

ENG 673 (3) Research & Theory Technical Communications

Seminar for students engaged in conducting a major research project in the technical communication field. Emphasizes theoretical approaches to research, development and implementation of the individual research project, and presentation and publication opportunities in professional writing.

ENG 677 (1-4) Individual Study

Focused study on a topic not covered in regularly scheduled courses.

ENG 678 (3) Technical & Scientific Prose

Analysis of fiction and literary nonfiction that treats technical and scientific themes.

ENG 679 (3) Topics Technical Communication

Topics relating to rhetorical theory in the workplace, including examination of how workplace cultures shape writing assumptions and approaches. May be repeated with different subject matter.

ENG 680 (1-3) Topics in Computer-Assisted Writing

Topics relating to the use of computers in pedagogy or technical communication. May be repeated with different subject matter.

ENG 682 (3) English Grammar and Discourse

Advanced study of English syntax.

ENG 684 (3) Sociolinguistics

Study of the interaction of language use and social structures.

ENG 685 (3) Materials for TESL

Location and assessment of commercial materials and creation and publication of original materials to support instruction in English as a second or foreign language.

ENG 686 (3) Second Language Testing

Introduction to language tests and the assessment of various language abilities.

ENG 687 (3) Theory & Practice Translation

Literary and non-literary translation.

ENG 689 (1-4) Studies English Linguistics

Studies in theoretical and applied linguistics. May be repeated with different subject matter.

ENG 690 (1-2) Workshop: Teaching Assistants

Continued workshop in composition pedagogy for first-year teaching assistants.

ENG 691 (1-3) Colloquium

Advanced studies in language, literature, film, or theory. Permission required.

ENG 693 (2) Introductory Workshop for TA's

Introductory workshop in composition pedagogy for first-year teaching assistants.

ENG 694 (1-2) Alternate Plan Paper

Independent capstone experience, focusing on secondary research sources; paper may have other guidelines specific to the program option.

ENG 698 (1-6) Internship

On-site field experience, the nature of which is determined by the specific needs of the student's program option.

ENG 699 (1-4) Thesis

Independent capstone experience, guidelines of which are determined by the requirements of a particular program option.

ENVIRONMENTAL SCIENCES MS

College of Science, Engineering & Technology

Biological Sciences

242 Trafton Science Center S • 507-389-2786

Graduate Coordinator: Beth Proctor, Ph.D.

The Graduate Program in Environmental Sciences offers the student the opportunity for study in the areas of environmental quality, restoration and natural resources. These areas encompass a broad range of practical problems which cross the boundaries of applied natural sciences, mathematics, economics, management and law.

This program provides flexibility and a multidisciplinary basis. This is accomplished by drawing on the expertise from many departments at Minnesota State University, Mankato. The focus of research and/or teaching available in the Environmental Sciences Program includes: Environmental Monitoring, Environmental Toxicology, Environmental Microbiology, and Environmental Assessment.

The Master's Thesis Option is strongly encouraged, however, a non-thesis option is also available.

Admission. In addition to meeting the general admission requirements of College of Graduate Studies and Research, students must have completed the following courses with a minimum grade of C: One year of Chemistry, College Algebra, General Ecology, and Plant Science or Animal Diversity. Students lacking some of the admission requirements may be conditionally admitted to the program. Conditionally admitted students are given one academic year to complete coursework deficiencies.

Graduate Assistantships. Environmental Sciences is a Program in the Department of Biological Sciences. Graduate assistantships are available through the Department of Biological Sciences.

Occupational Outlook. There are diverse opportunities for employment in the area of environmental sciences. Numerous opportunities exist in environmental analysis and monitoring of environmental media (water, soil, air, indoor air, organisms, food, biological fluids, etc.). There are positions available in the regulation and monitoring of agricultural activities such as management of feed lots and septic systems; and in water planning on the county, regional, and state level. Moreover, there are positions in industrial (work place environment), data management, chemical evaluation, quality control and quality assurance and geographic information systems (GIS).

There is also a need for persons with Environmental Science coupled with emphasis in Business, Economics, Political Science, and/or Urban and Regional Studies.

Potential employers include the Environmental Protection Agency (EPA); U.S. Geological Survey; the Department of Agriculture; the Food and Drug Administration (FDA); other federal, state and local government agencies, as well as private industry. Many of these employers study chemicals to determine if they are harmful, their mode of action, how they move in the environment, and whether they are carcinogenic or teratogenic (causing cancer or birth defects). The Environmental Sciences Program works with the EPA, as well as other federal and state agencies, to secure grants which support faculty and graduate student research. These contacts may lead to internships and/or permanent employment opportunities for graduates.

Professional positions are usually available for persons with hands-on experience in analytical instrumentation used in the detection of environmental contaminants, environmental modeling, data management including quality control and quality assurance, and geographic information systems. Employment is often secured through contacts with advisors, industry, internships and other links between the

Environmental Sciences Program with state and federal agencies and institutions. Students also interview for jobs at meetings held by such professional organizations as the American Chemical Society. The Career Development and Counseling Center at Minnesota State University, Mankato is another source of job information and offers workshops that help students prepare credentials and interview skills.

Advising, Thesis Track (30 Credits). At the end of the first academic year the student should select a permanent advisor, an area of emphasis and a research thesis topic. The student with his/her advisor should select members from the graduate faculty to serve on the advisory committee. The advisory committee usually consists of 3-5 graduate faculty members. The advisory committee must include two members of the Department of Biological Sciences. The advisory committee is chaired by the student's advisor reviews and approves the coursework, research and thesis. A thesis will prepare students for the more technical fields or doctoral programs.

Advising, Alternate Plan Paper (34 Credits). At the end of the first academic year, the student should select a permanent advisor and an area of specialization. The student with his/her advisor should select members from the graduate faculty to serve on the advisory committee. The advisory committee usually consists of 3-5 graduate faculty members. The advisory committee must include two members of the graduate faculty from the Department of Biological Sciences. The advisory committee reviews and approves the student's course work and Alternate Plan Paper.

ENVIRONMENTAL SCIENCE MS**Required Core (16 credits)**

ENVR 540	Environmental Regulations (3)
ENVR 550	Environmental Pollution and Control (3)
ENVR 560	Analysis of Pollutants (4)
BIOL 510	Human Ecology (3)
ENVR 600	Environmental Assessment (3)

Required Environmental Science**Electives (6 credits)**

Choose **two** courses from the following:

URSI 604	Zoning & Legal Issues (3)
URSI 609	Applied Urban Analysis (3)
URSI 661	Long-Range & Strategic Planning (3)
URSI 662	Operational Planning (3)
GEOG 673	GIS For Planners (3)
GEOG 681	Environmental Issues (3)
POL 669	Public Policy Analysis (3)
POL 670	Urban Law (3)

Required Electives

The remaining coursework will be drawn from other programs across University offerings.

Required Thesis or Alternate Plan Paper

ENVR 694	APP (1-2)
ENVR 699	Thesis (3-6)

Additional Requirements:

A maximum of 9 credits can be taken of ENVR 600- level courses such as, independent study, internship, seminar, in-service, thesis and/or alternate plan paper. All courses must be approved (in advance) by the student's advisor and must be pertinent to the student's career goals. Independent study and internship credits from other programs **cannot** be used for electives in Environmental Sciences. Fifty percent of the coursework must be at the 600 level (excluding thesis and APP credits).

COURSE DESCRIPTIONS**ENVR 540 (3) Environmental Regulations**

This lecture course introduces students to major federal environmental statutes, including the Clean Water Act; Clean Air Act; Safe Drinking Water Act; Resource, Conservation and Recovery Act; CERCLA (Superfund); Federal Insecticide, Fungicide and Rodenticide Act; Toxic Substances Control Act; Endangered Species Act; and Food, Drug and Cosmetic Act. In addition, several state of Minnesota environmental statutes will be discussed.

(F)

ENVR 550 (3) Environmental Pollution & Control

This is a lecture course focusing on the sources and control of pollutants in air, soil, water, and groundwater. Hazardous waste treatment and the effects of pollutants on human health are also discussed.

(F)