
regional planning through the use of GIS technology, particularly Arc/Info. Students will be introduced to various urban planning projects taking place in various local agencies. *This course is **not** for Geography students.

677 (1-4) Individual Study

A study assignment for a student to meet specific objectives for the student's needs. It could be a term paper, readings, reports, field report, or mapping project.

Pre: permission of instructor

678 (3) Geographic Research and Writing

Required of MS professional degree candidates. To acquaint students with the geographer's perspective and methods of inquiry; to examine types of geographic research; to develop student's ability in producing research papers; to give students experience in writing research papers and to provide students experience in professional oral presentation.

680 (3) Philosophy of Geography

The history and development of geographic thought from ancient times to the late 20th century.

681 (3) Environmental Issues

This course surveys various environmental issues within the United States with an emphasis on state and federal legislation and policies. The forces prompting environmental legislation, its subsequent implementation and modification by the courts, and various perspectives about the problems, their possible solutions, and the assessment of current efforts are discussed.

690 (1-4) Topics in Meteorology/Climatology

The focus of this/these course(s) will be on Meteorology/Climatology. This course may be repeated up to three times.

694 (1-2) Alternate Plan Paper

Student culminating experience in lieu of a thesis.

698 (1-6) Internship

An applied work and learning practicum. The student will provide a written report on his/her own learning. The work supervisor will be consulted regarding students' accomplishments.

699 (3-6) Thesis

A culminating project related to basic or applied research.

GEOLOGY

*College of Science, Engineering & Technology
Chemistry and Geology Department
N242 Trafton • 507-389-1963*

Geology is the science of the earth. It concerns itself with the materials that constitute the earth, their disposition and structure, the processes of work both on and within the earth, and both the physical and biological history of the earth.

The following graduate courses are offered and may be used to supplement existing graduate programs or may be part of a multidisciplinary studies program.

COURSE DESCRIPTIONS

501 (1-3) Field Studies

Students will learn the basis and methods of geological field studies and then participate in a field trip to an area of significant geological importance. Vehicles for transportation to and from the field site are required. A special student field trip is anticipated to offset vehicle and equipment costs. Students will be responsible for lodging and food.

550 (3) Hydrogeology

This course introduces physical and chemical studies of hydrogeology. The main area of discussion will include the physical and chemical attributes of aquifers, movement of groundwater and solute through soils and rocks, and reactions between earth materials and pollutants in groundwater systems. The class includes extensive use of MODFLOW and MT3D, the two most commonly used groundwater modeling programs currently available.

590 (2) Workshop

591 (1-6) In-Service

A course designed to upgrade the qualifications of a person on the job. Content is variable. The course can be repeated for credit.

677 (1-4) Independent Study

GERONTOLOGY MS

*College of Social & Behavioral Sciences
Gerontology Program
111 Armstrong Hall • 507-389-6307*

Gerontology is the scientific study of the biological, psychological and social aspects of aging. The Gerontology program, in cooperation with the Center on Aging, coordinates the delivery of the curriculum in human aging and facilitates activities of education, research and service which create, disseminate and apply knowledge about aging. The primary purpose of the graduate curriculum in aging is to provide a knowledge base in gerontology which, when combined with professional knowledge and skills, prepares the student for practice

in the aging network. The program offers both general and administrative tracks of study at the graduate level. In addition to the Master of Science in Gerontology, Minnesota State also offers a Graduate Certificate of Study in Gerontology and specialized coursework leading to original licensure as a nursing home administrator in Minnesota. The University is a member of the Association for Gerontology in Higher Education.

Admission. Applications for admission to the MS in Gerontology program may be submitted at any time. Although entrance in fall semester is preferred, permission may be granted for study to commence at other times during the academic year. Full admission requires a baccalaureate degree, a minimum 3.0 GPA, at least 16 credits of social and behavioral science and evidence of promise for successful graduate study and professional practice with older adults. The GRE is not required.

Financial Assistance. One or more graduate assistantships in Gerontology are normally available each year on a competitive basis. Other financial assistance may become available from time to time, e.g., research assistance or special project work. Contact the program director for current information.

GERONTOLOGY MS

(Thesis Plan - 30 cr)

(Alternate Plan Paper - 34 cr)

One-half of the total credits for the degree must be 600 level credits. A minimum of 24 credits of Gerontology is required under either plan. Within these 24 credits, a maximum of three credits of internship and either four credits of thesis or two credits of alternate paper research may be included.

Required Core (15 cr)

Select a minimum of **one** course from each of the **three** core areas. Other core courses can be used as electives.

Social-psychological

ANTH 536 Anthropology of Aging (3)
 PSYC 566 Psychology of Aging (3)
 SOC 504 Sociology of Aging (3)
 WOST 545 Women and Aging (3)

Bio Medical

BIOL 517 Biology of Aging (3)
 FCS 543 Older Adult Nutrition (3)
 HLTH 555 Health and Aging (3)

Policy/Applied Theory

GERO 585 Topics in Gerontology (1-3)
 GERO 601 Seminar in Gerontology (1-3)
 POL 564 Aging: Policy Issues (3)
 SOWK 519 Social Work and Aging (3)

Required Research (9 cr)

GERO 600 Theories and Practice (3)
 ----- 6--- One 600 level research

methods course (3)

GERO 697 Internship (3)

Required Gerontology Electives (8-14 cr)

Choose any 500/600 level Gerontology elective courses in consultation with an advisor.

Required Thesis or Alternate Plan Paper

GERO 694 Alternate Plan Paper (2)

GERO 699 Thesis (4)

Other electives available in Gerontology

FCS 574 Residential Management for Families and Special Needs People (3)
 GERO 580 Nursing Home Administration (3)
 GERO 677 Individual Study (1-4)
 HLTH 541 Death Education (3)
 RPLS 582 Leisure Needs of the Aging (3)
 SOC 505 Sociology of Death (3)
 SOWK 519 Social Work and Aging (3)

Additional credits needed to meet degree requirements and to meet the specific educational objectives of the student are to be chosen from the Gerontology list and/or from the offerings of other departments with emphasis on course work at the 600 level. For example, one might include course work in program planning, administration and evaluation and/or graduate-level course work which is required for nursing home administration licensure. Early consultation with the Gerontology Program Director is required to assure careful program planning and maximum utilization of program options.

Certificate of Study in Gerontology

The Certificate of Study in Gerontology is granted on completion of 18 credits of approved course work in Gerontology. The program is intended for persons who wish to acquire a core of knowledge and skill in Gerontology but who may not wish to pursue a degree program with a Gerontology component. The certificate signifies completion of an approved multidisciplinary course of study in Gerontology. As such, it may have value to prospective employers who seek evidence of specialized study relevant to working with and on behalf of the elderly. Admission to the certificate program requires formal application to the Gerontology program. Upon admission, a program of study must be developed with and approved by the program advisor. Academic advising for the certificate program is provided by the director of the Gerontology program.

COURSE DESCRIPTIONS

580 (3) Nursing Home Administration

Issues and trends, programs and services, funding mechanisms and regulations. Meets state educational requirements for specific content areas.

585 (1-3) Topics in Gerontology

Topics vary as announced in class schedule. May be retaken for credit if topic is different.

600 (3) Theories and Practice

601 (3) Seminar in Gerontology

Topic varies with offering. May be taken more than once.

677 (1-4) Individual Study in Gerontology

Pre: consent

694 (2) Alternate Plan Paper Research

Pre: consent

697 (1-4) Internship in Gerontology

Pre: by application and consent

698 (1-6) Practicum in Nursing Home Administration

For students following the program of study for nursing home administration licensure.

Pre: by application and consent

699 (4) Thesis

Pre: Consent

HEALTH SCIENCE

COMMUNITY HEALTH MS

SCHOOL HEALTH

EDUCATION MS

(DISCIPLINE-BASED)

*College of Allied Health and Nursing
Health Science Department*

213 Highland North • 507-389-1527

Chair: Judith K. Luepke, Ph.D., CHES

Graduate Coordinator: Judith K. Luepke, Ph.D., CHES

M. Dawn Larsen, Ph.D., Linda Marshall, Ph.D.,
Marge Murray-Davis, Ph.D., Bikash Nandy, Ph.D.,
John Romas, Ph.D.

The Department of Health Science offers graduate study in several broad areas: community health, school health, and alcohol and drug studies. The Community Health emphasis is designed for the professional interested in health promotion in either public, private or volunteer organizations. The Alcohol and Drug Studies emphasis allows students to apply for the Certified Chemical Dependency Credential through the Institute of Chemical Dependency Professionals of Minnesota. The School Health Education degree is for licensed teachers seeking advanced study in health education.

COMMUNITY HEALTH SCIENCE MS

(Thesis Plan - 30 cr)

(Alternate Plan Paper - 34 cr)

Required Core (21 cr)

HS 630 Techniques of Research (3)

HS 631 Seminar (3)

HS 665 Theory & Philosophy in Health Education (3)

HS 659 Health Care Administration (3)

HS 664 Health Program Planning & Evaluation (3)

HS 560 Epidemiology: Practice & Theory (3)

HS 575 Biostatistics (3)

Required Health Science and Related Electives (9-13 cr)

any 500/600 level electives selected in consultation with an advisor

Required Thesis

HS 699 Thesis (1-6, minimum of 3)

SCHOOL HEALTH EDUCATION MS (DISCIPLINE-BASED)

(Thesis Plan - 30 cr)

(Alternate Plan Paper - 34 cr)

Required Core (21 cr)

HS 630 Techniques of Research (3)

HS 631 Seminar (3)

HS 510 Current Health Issues (3)

HS 665 Theory & Philosophy in Health Education (3)

HS 661 Curriculum Trends (3)

HS 560 Epidemiology: Practice & Theory (3)

HS 575 Biostatistics (3)

Required Professional Education Electives (6 cr)

any 500/600 level Professional Education electives selected in consultation with an advisor

Required Health Science and Related Electives (3-7 cr)

any 500/600 level electives selected in consultation with an advisor

HS 699 Thesis (1-6, minimum of 3)

COURSE DESCRIPTIONS

500 (3) Women's Health

This course will explore current issues, controversies and concerns affecting women's health. Relationships between social, cultural, psychological, environmental and physical factors of women's health status will be examined.

510 (3) Current Health Issues

An in-depth review of significant current health concerns and controversies in health science using the elements of reasoning as the framework for critiquing the issues.

Pre: HLTH 475

541 (3) Death Education

Explores the relationship of death concerns to the process of meaningful living. Utilizes a variety of learning strategies to examine death attitudes, values and related behaviors.