

# Academic Division Structure

- 59 Division of Education
- 59 Division of the Humanities
- 60 Division of Science and Mathematics
- 60 Division of the Social Sciences
- 61 Interdisciplinary Programs
- 61 Continuing Education, Regional Programs, and Summer Session

# Academic Division Structure

Disciplines (i.e., departments or fields such as English, physics, or psychology) are grouped administratively into four divisions—Education, Humanities, Science and Mathematics, and Social Sciences—to help integrate the various areas of study into a liberal arts curriculum, provide a forum for faculty discussion of common programs and interests, and encourage the planning of interdisciplinary academic programs. In addition, there are interdisciplinary courses, internships, and majors that cross divisional lines; these are found under Interdisciplinary Studies and fall under the direct responsibility of the vice chancellor for academic affairs and dean.

There are also courses from disciplines across the campus offered through Continuing Education. Such courses serve two distinct purposes. Some Continuing Education courses are on topics not found elsewhere in the curriculum and are designed for regularly enrolled students. Other Continuing Education courses are offered primarily to off-campus students enrolled in such programs as extension classes or through GenEdWeb, an online program targeted to academically talented high school students. Courses offered through Continuing Education are designated as such in the last sentence of the course description. All courses offered through Continuing Education have an academic home in one of UMM's disciplines.

Courses are listed alphabetically by discipline. Each discipline description includes, as appropriate, requirements for the major and/or the minor. Teacher education licensure requirements can be found in the Education, Elementary and Education, Secondary sections.

## Division of Education

**Education (page 91)**

**Education, Elementary (page 92)**

**Education, Secondary (page 96)**

**Wellness and Sport Science (page 180)**

In education programs, students can study education and its role in society; complete a major and teaching licensure in elementary education with a preprimary or middle level specialty; prepare to teach one or more liberal arts subjects at the secondary school level; and/or prepare for graduate study in education.

Intercollegiate athletics, lifetime physical activity classes, coaching endorsement, and courses addressing sports management and various wellness issues are offered in the wellness and sports science discipline.

Many students enrolled at UMM, no matter what their area of study, participate in intercollegiate athletic competition, which is directed by the wellness and sport science faculty.

Division of Education programs are enhanced through faculty commitment to personalized instruction, use of current instructional technologies, student research, and opportunities for student and faculty participation in multicultural and international educational experiences.

## Division of the Humanities

**Art History (page 69)**

**Art, Studio (page 71)**

**Communication, Media, and Rhetoric (page 81)**

**Dance (page 86)**

**English (page 104)**

**French (page 120)**

**German (page 130)**

**Humanities (page 137)**

**Music (page 154)**

**Philosophy (page 157)**

**Spanish (page 173)**

**Theatre Arts (page 178)**

The Division of the Humanities is composed of 10 disciplines offering a major, as well as supplementary courses in dance and the humanities, e.g., the literature and thought of the non-English-speaking world in translation.

Since the time of the ancient Greeks and Romans, the disciplines in the humanities have been central to the meaning of a liberal education. These disciplines investigate important questions about the nature of human beings and their cultures, and examine alternative views concerning the meaning and direction of life.

In addition to its curricular programs, the Division of the Humanities sponsors and directs a varied program of cocurricular activities, organizations, and events for the campus and surrounding communities, including:

- Student art exhibitions, an active student Art Club, and Art Gallery exhibits of works by professional artists
- Scheduled poetry readings; the Prairie Gate Press; foreign and American films; the Writing Room to help students develop creative and expository writing skills; lectures on literary and language subjects; French, German, and Spanish student clubs with a variety of projects; opportunities for language students to travel and study abroad
- A varied program of musical events, including symphonic winds, orchestra, jazz ensemble, and choir concerts, as well as recitals by students and faculty; opportunities to work with well-known composers and artists in residence; tours
- A philosophy colloquium in which internationally distinguished philosophers participate
- A number of opportunities in communication, media, and rhetoric, including sponsorship of speakers and discussion groups, student attendance at conferences, and participation in the student organization Communication Club, as well as the UMM Intercollegiate Speech Team, which competes at several meets each year
- Annual offering of faculty- and student-directed plays; opportunities to work with professional troupes in residence; annual theatre tour to New York or London, when feasible

The Division of the Humanities provides students with opportunities to participate in the varied curricular and cocurricular programs described above. Through participation in these programs either as employees or volunteers, scores of students each year discover for themselves the meaning and value of a liberal education.

Finally, the Division of the Humanities offers its students one of UMM's most beautiful and useful facilities, the Humanities Fine Arts Center—a building to which *Progressive Architecture* granted its First Design Award with the following citation:

“It gives architectural form to a powerful new direction in education—the school being integrated into the community. This project shows how the school can be a model for community development.”

## Division of Science and Mathematics

**Biology (page 75)**

**Chemistry (page 78)**

**Computer Science (page 83)**

**Environmental Science (page 108)**

**Geology (page 127)**

**Mathematics (page 151)**

**Natural Science (page 157)**

**Physics (page 159)**

**Statistics (page 176)**

Whether interested in biology, chemistry, computer science, geology, mathematics, physics, or statistics, students find that programs in UMM's Division of Science and Mathematics offer excellent preparation for employment in a related field, graduate study, or teaching in junior or senior high school. Courses leading to Minnesota secondary education licensure are offered in chemistry, physics, life science, earth and space science, and mathematics. The sciences form an integral part of UMM's preprofessional programs in the health, medical, and engineering fields and contribute to general education studies.

Students have many opportunities to work closely with their professors. Students have conducted research on human-computer interaction, program optimization, and evolutionary computation. They have helped develop a variety of methods for the analysis of statistical data, such as a loglinear model of educational data and the representation of three-dimensional copulas in terms of two-dimensional marginals. Students researched the physics of highly excited atoms, studied emissions of astronomical masers, performed observational optical astronomy, and modeled the behavior of materials with computers. They have investigated the role of fire in prairies, invasive species in forests, macroinvertebrate communities in prairie pothole lakes, regulation of cell cycles and bioluminescence, genetics of endangered species, microbial resistance to antibiotics, vertebrate embryogenesis, and effects of changing climate and atmosphere on forest trees. They have studied the geology of glacial deposits in Minnesota, analyzed

the fossils and sediments of the Cretaceous Seaway in South Dakota, and contributed to faculty field research in the Rocky Mountains of Colorado and Idaho. They have conducted research on the breakdown of pesticides, the preparation of novel chemical compounds, and the development of new chemical reactions both at UMM and in universities and laboratories across the country. Students are encouraged to publish results of their research with faculty or to present their findings at conferences or seminars. Many students at some time serve as teaching assistants, earning a financial stipend while assisting professors in tasks such as helping with laboratory courses, tutoring beginning students, assisting with greenhouse maintenance, and operating the UMM telescope.

In geology and biology, field trips are an integral part of the learning process. Students and faculty have traveled to the Florida Keys, to central and coastal Belize, to the volcanoes of Hawaii, to the deserts of Arizona and New Mexico, to western Canada and Alaska, and throughout Minnesota and surrounding regions of the Upper Midwest, in seeking a better understanding of our Earth's natural environments, landforms, and processes.

Students will find other ways to enhance their studies in the sciences. The Geology, Math, ACM Computer Science, Biology, ACS Chemistry, and Physics and Engineering Clubs provide an opportunity for students and faculty who share mutual interests to meet informally and participate in related activities. In addition, visiting scientists frequently come to campus to discuss current scientific problems and topics with UMM faculty and students.

## Division of the Social Sciences

**Anthropology (page 67)**

**Economics (page 87)**

**Gender, Women, and Sexuality Studies (page 123)**

**Geography (page 127)**

**History (page 132)**

**Liberal Arts for the Human Services (page 143)**

**Management (page 147)**

**Political Science (page 161)**

**Psychology (page 164)**

**Social Science Major (page 167)**

**Sociology (page 171)**

The social sciences consist of the branches of study dealing with the structure of society and the activities of its members. The Division of the Social Sciences includes the disciplines of anthropology, economics, geography, history, management, political science, psychology, and sociology. In addition, its courses are incorporated into the interdisciplinary programs in American Indian studies, environmental studies, Latin American area studies, and European studies. It also offers majors in gender, women, and sexuality studies and liberal arts for the human services; and a social science major for teacher licensure. The social sciences coursework is oriented

toward liberal education studies that prepare students to broadly understand human behavior, the institutions created by humans, and the resulting interactions.

Many of the social science disciplines encourage various kinds of fieldwork. Students intern on the local as well as state and national levels.

A hallmark of the social sciences at UMM is undergraduate research. Students author or coauthor research papers and projects with faculty and present papers at professional conferences. Many students serve as research and teaching assistants. They go beyond the boundaries of a strict “classroom” education to explore and gain firsthand experience with the professional tools of their field.

UMM’s Division of the Social Sciences has many resources that lend themselves well to establishing individual and group learning experiences. These include a wide variety of service learning opportunities, internships, and field studies programs.

Close student-faculty rapport is an important aspect of social sciences study. Individualized attention is emphasized and faculty members encourage students to work with them on a one-to-one basis in order to create programs and access opportunities that best suit students’ needs and interests.

## Interdisciplinary Programs

**African American Studies (page 64)**

**American Indian Studies (page 65)**

**Environmental Studies (page 111)**

**European Studies (page 114)**

**Interdisciplinary Studies (page 138)**

**Latin American Area Studies (page 141)**

UMM offers interdisciplinary majors and/or minors—whose educational objectives are realized through the integration of courses from two or more disciplines—in African American studies, American Indian studies, environmental studies, European studies, Latin American area studies, liberal arts for the human services, and gender, women, and sexuality studies. Interdisciplinary course offerings not associated with an interdisciplinary major or minor involve in-depth material of two or more traditional academic disciplines or divisions, and some include subject material of a very broad nature that cannot properly be regarded as a part of a traditional discipline or division.

## Continuing Education, Regional Programs, and Summer Session

**Chinese (page 81)**

**Interdisciplinary Studies (page 138)**

**Italian (page 140)**

Continuing Education, Regional Programs, and Summer Session (CERP) shares in the liberal arts mission of UMM and also serves as the primary outreach unit of the campus. CERP offers credit and non-credit courses and programs. Courses also include topics in art history, studio art, biology, Chinese, Dakota language, dance, economics, education, English, French, geology, history, humanities, Italian, management, music, political science, Spanish, theatre arts, and wellness and sport science.

Courses offered through Continuing Education are identified as such at the end of the course description. For complete details on the mission, function, and work of Continuing Education, Regional Programs, and Summer Session, **see page 9** in this catalog.