**MATHEMATICS AND PHYSICS**

**Faculty:**
Karen G. McPherson, Chairperson
Imad Benjelloun
Svetlana Shkitko
Michael N. Tabachnick
Ruth Trubnik
Jeffrey A. Young

Mathematics is a language common to many different areas of human endeavor. Applied mathematics, in particular, is used in professions as diverse as actuarial science, operations research, management science, decision analysis, engineering physics, biometrics, econometrics and education. The Mathematics Department offers a broad range of courses. At the freshman level, the core courses are designed to increase students’ mathematical literacy while providing background in the basic areas of mathematics. The upper level courses offer the specialized knowledge and skills necessary to prepare students for careers in science, business or education.

A minor in mathematics may be obtained by completing a minimum of 15 credit hours of course work in mathematics beyond any mathematics courses required by a student’s major. The program of a student who minors in mathematics must in any case include at least 2 semesters of Calculus.

**Natural Resources and Biosystems Management**

**Faculty:**
Barbara D. Muse, Chairperson
Richard Cowhig
Steven S. DeBroux
Howard Eyre
Michael J. Fleischacker
Lawrence D. Hepner, Jr.
Douglas T. Linde
Mingwang Liu
John D. Martin
Ronald R. Muse
Jacqueline A. Ricotta

The impact of humans on the planet is becoming increasingly evident. Now as never before, we are using the resources of our planet to provide more food, more clean water, more energy, and aesthetically pleasing living environments for an ever increasing population. Students within this department acquire the knowledge and skills that will enable them to be responsible productive citizens of the earth. Biosystems Management deals with the interaction of humans and natural systems to develop functional connections for food production, water use, waste management, fuel generation, aesthetics and other uses of natural resources to meet human needs in a sustainable fashion. Within Natural Resources and Biosystems Management, there are three degree areas of study: Agronomy and Environmental Science; Horticulture; and Ornamental Horticulture and Environmental Design. Together the three degree areas offer a total of nine different majors.

**Agronomy and Environmental Science**

- Crop Science
- Environmental Science
- Turfgrass Management

**Horticulture**

- Commercial Crop Production and Marketing/Plant Health Management
- Hydroponic Crop Science
- Plant Science and Biotechnology

**Ornamental Horticulture and Environmental Design**

- Environmental Design
- Floriculture and Nursery Production and Marketing
- Landscape Contracting and Management

**AGRONOMY AND ENVIRONMENTAL SCIENCE**

**Faculty:**
Barbara D. Muse, Chairperson
Steven S. DeBroux
Lawrence D. Hepner, Jr.
Douglas T. Linde
Ronald R. Muse

Agronomy and Environmental Science is one of three areas of study that are found within Natural Resources and Biosystems Management. Students studying in the Agronomy and Environmental Science area can select from three majors: Soils and Environmental Science, Crop Science, and Turf Management.

The Environmental Science major focus is on the environmental issues facing society today and the knowledge and training necessary to deal with these complex issues. Computers and geographic information systems aid in analysis and visual display of information. Interdisciplinary courses from the...