

## Emphasis - Pharmacology

- [M.S. in Pharmaceutical Sciences](#)
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### **M.S. in Pharmaceutical Sciences** **Description**

The M.S. in pharmaceutical sciences can be completed with an emphasis in environmental toxicology, medicinal chemistry, pharmaceuticals, pharmacology, pharmacognosy, or pharmacy administration.

#### **Minimum Total Credit Hours: 31**

#### **Course Requirements**

Requirements for each emphasis area are given in the respective program description sections. Each emphasis area requires students to complete a minimum of 24 semester hours of course work and 6 hours of thesis.

### **Emphasis - Pharmacology** **Description**

The M.S. in pharmaceutical sciences with emphasis in pharmacology involves the study of the interaction of drugs, chemicals, and physical agents with biological systems and their constituent parts.

#### **Course Requirements**

The M.S. in pharmaceutical sciences with an emphasis in pharmacology or toxicology requires the core courses listed below, as well as at least 6 thesis hours. In addition, students are expected to enroll in the Pharmacology Seminar (Phcl 643) each semester. Students who have earned a baccalaureate degree in pharmacy, toxicology, chemistry, biological science, psychology, biochemistry, medicine, or a related field are eligible to apply for admission to the graduate program. Undergraduate course prerequisites include physiology, biochemistry or cell biology, advanced mathematics (level of calculus), and organic chemistry.

Graduate Course Requirements 1. Introduction to Pharmacology I (Phcl 563), 4 hours; 2. Principles of Life Science Research (Phcl 501), 1 hour; 3. Quantitative Methods in Psychology 1 (603) or equivalent, 3 hours; 4. General Principles of Pharmacology and Toxicology I (Phcl 675), 4 hours; 5. Physiological Chemistry (Phcl 669), 4 hours; 6. Advanced Physiology (Phcl 661), 4 hours; 7. Directed Studies in Pharmacology and Toxicology (Phcl 651), 1 hour; 8. Teaching in Pharmacology and Toxicology (Phcl 611, 612), 1 hour, 1 hour; 9. Seminar: Current Topics in Pharmacology and Toxicology (Phcl 643), 4 hours; 10. Thesis (Phcl 697), 6 hours.

#### **Other Academic Requirements**

An experimental research project and thesis in the area of pharmacology or toxicology is required.

