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- [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: 30

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. Graduates are likely to find careers positions within academic, industry or government service. Additionally, the MS degree program prepares individuals who wish to enhance their academic credentials by acquiring a higher degree before pursuing further studies in medical, dental, pharmacy or PhD programs.

Note: For more information, refer to the student handbook

[Graduate Student Handbook](#)

Goals/Mission Statement

The academic mission of the Department of BioMolecular Sciences, Pharmacology Division is to apply pharmacological sciences to the teaching of professional pharmacy students and graduate students and to conduct research and educational activities that seek to identify and resolve problems related to basic and applied pharmacology.

Course Requirements

The requirements for the M.S. in pharmaceutical sciences with an emphasis in pharmacology consist of a minimum of 14 core course hours:

- Phcl 675: Principles of Pharmacology and Toxicology I (4 hours)
- Phcl 676: Principles of Pharmacology and Toxicology II (4 hours)
- BMS 601: Graduate Student Survival Strategies (2 hours)

additionally one of the following 4 credit courses:

- Phcl 661: Adv. Physiology I
- Phcl 662: Adv. Physiology II
- Phcl 669: Physiological Chemistry

and a minimum of 6 course hour electives, exclusive of graded seminars (see below), from biomolecular sciences, biology, chemistry, engineering or other graduate-level programs (contingent upon Division of Pharmacology faculty approval).

Seminar Requirement

Students are required to register for BMS 643 (Z grade) every semester, with the exception of those semesters in which the student presents a seminar and instead registers for BMS 641 (graded). No more than 4 seminar hours can be used toward the 24 minimum total credit hours.

A minimum of 6 hours of thesis research must also be taken to meet degree requirements.

Other Academic Requirements

A thesis based upon experimental work in the general area of pharmacology is required.

Degree Requirements and Expectations

Pharmacology graduate students must meet a high level of academic achievement to maintain eligibility. Students are expected to maintain an overall GPA of at least 3.0 (B).

