**Ph.D. in Pharmaceutical Sciences**

**DESCRIPTION**

The Ph.D. in pharmaceutical sciences can be completed with an emphasis in environmental toxicology, medicinal chemistry, pharmaceutics, pharmacology, pharmacognosy, or pharmacy administration.

**MINIMUM TOTAL CREDIT HOURS: 54**

**COURSE REQUIREMENTS**

Requirements for each emphasis area are given in the respective program description sections.

**Emphasis - Pharmacology**

**DESCRIPTION**

A Ph.D. in pharmaceutical sciences with emphasis in pharmacology is designed to prepare graduate students to apply understanding of basic pharmacology so as to strengthen their academic foundation and skills that lead to professional careers as pharmacologists. Our faculty’s current research interests and areas of specialization include cancer, cardiovascular pharmacology, infection, neuropharmacology and neurodegeneration and toxicology. The pharmacology doctoral program is a full-time program that generally requires four to five years to complete. Most graduates of the pharmacology program enter industry, research institutions or academia.

Note: For more information, refer to the student handbook

<http://pharmacy.olemiss.edu/biomolecularsciences/gradprogram/bms-graduate-student-handbook/>

**GOALS/MISSION STATEMENT**

The academic mission of the Department of BioMolecular Sciences, Division of Pharmacology is to provide advanced training in basic pharmacological sciences and to expose professional pharmacy students and graduate students to the latest conceptual and technical developments in biomedical sciences.

**COURSE REQUIREMENTS**

The requirements for the Ph.D. with emphasis in pharmacology consist of a minimum of 14 core course hours (PHCL 563: Pharmacology 1- 4h, PHCL 564: Pharmacology II- 4h, PSY 703: Quantitative method- 3h, and BMS 601: Graduate Student Survival Strategies- 2h, and BMS 605:Original Research Proposal- 1h), two of the following four 4-credit courses (PHCL 661: Adv. Physiology I- 4h, PHCL 662: Adv. Physiology II- 4h, PHCL 669: Physiological Chemistry- 4h, and PHCL 675: Gen Princ of Pharmacology & Toxicology I- 4h), and a minimum of 6 course hours of electives, exclusive of seminars (see below), from BioMolecular Sciences, Biology, Chemistry, or other graduate level programs (contingent upon Division of Pharmacology faculty approval).

A minimum of 18 hours of dissertation research must also be taken to meet degree requirements.

Seminar Requirement - Seminars are given yearly. Students are required to register for BMS 643 (Z-grade, 1 credit) every semester, with the exception of those semesters in which the student presents a seminar and instead registers for BMS 641 (graded, 1 credit). Students will accumulate at least eight seminar hours (4 graded, 4 Z-grades) over the course of their studies.

**OTHER ACADEMIC REQUIREMENTS**

Original Research Proposal - A student must prepare, submit, and successfully (orally) defend an original research proposal (ORP). Procedures for this requirement will be provided by the department. Students will register for BMS 605 (Original Research Proposal BioMolecular Sciences) in the semester they anticipate defending their ORP.

Dissertation - A student must prepare and orally defend a dissertation based on original, independent research in partial fulfillment of their Ph.D. degree.

**DEGREE REQUIREMENTS AND EXPECTATIONS**

Pharmacology graduate students must meet a high level of academic achievement to maintain eligibility. Only grades of A or B are acceptable in the required courses. Students are expected to maintain an overall GPA of at least 3.0 (B).