PHARMACEUTICAL SCIENCES (PHD) - MEDICINAL CHEMISTRY EMPHASIS

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. Each emphasis area requires students to complete a minimum of 36 semester hours of course work and 18 hours of dissertation

Emphasis - Medicinal Chemistry

Description

A Ph.D. in pharmaceutical sciences with emphasis in medicinal chemistry prepares a graduate to perform basic and applied interdisciplinary research in drug discovery and development using the tools of computational chemistry, synthetic chemistry, and biological evaluation. Current faculty research programs are focused in cancer, infectious disease, cardiometabolic disorders and neuroscience/drugs of abuse.

Note: For more information, refer to the student handbook

http://pharmacy.olemiss.edu/biomolecularsciences/gradprogram/bms-grad uate-student-handbook/

Goals/Mission Statement

The mission of the Department of BioMolecular Sciences, Division of Medicinal Chemistry is to apply chemistry and the chemically related sciences to the teaching of professional pharmacy students and graduate students. The research mission of the department is the discovery, design, analysis, and further development of potential drugs and the discovery of potential drug design targets.

Course Requirements

The course requirements for the Ph.D. with emphasis in medicinal chemistry consist of:

Code	Title	Hours
BMSC 6010	Graduate Student Survival Strategies	2
MEDC 5011	Advanced Medicinal Chemistry I	3
MEDC 5070	Organic Chemistry of Drug Synthesis	3
MEDC 5410/5420	Problems in Medicinal Chemistry	1-4
Medc/Phcg/BMSC courses 6000/7000 level		12
Elective courses 5000/6000/7000 level		6
BMSC 6050	Original Research Proposal BMS	1

Seminar Requirement

Students are required to register for BMSC 6430 BioMolecular Sciences Seminar (Z-grade) every semester, with the exception of those semesters in which the student presents a seminar and instead registers for BMSC 6410 BioMolecular Sciences Seminar (graded). No more than 8 seminar hours can be used toward the 54 minimum total credit hours.

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

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 BMSC 6050 Original Research Proposal BMS (Original Research Proposal BioMolecular Sciences) in the semester they anticipate defending their ORP.

MALTO Presentation

All graduate students in the Ph.D. program will be required to present their original research in the form of a podium presentation at one of the annual MALTO Medicinal Chemistry Meetings-in- Miniature.

Dissertation

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