**Emphasis - Medicinal Chemistry**

**M.S. in Pharmaceutical Sciences**

**Description**
The M.S. in pharmaceutical sciences can be completed with an emphasis in environmental toxicology, medicinal chemistry, pharmaceutics, 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 - Medicinal Chemistry**

**Description**
An M.S. in pharmaceutical sciences with emphasis in medicinal chemistry prepares a graduate to do research toward understanding the mechanism of action of drugs. In such research, a medicinal chemist strives to establish correlations between biological properties and physiochemical parameters of drugs.

**Course Requirements**
Students enrolled in the Master of Science degree in Pharmaceutical Sciences with an emphasis in Medicinal Chemistry will be required to complete a minimum of 24 semester hours of course work and 6 hours of thesis. Students will be required to enroll in the following courses as a minimum; additional courses may be taken:

- Graduate Student Survival Strategies (BMS 601) (2 hours)
- Biomolecular Sciences Seminar (BMS 641, repeated for credit, graded) — 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 30 minimum total credit hours.
- Advanced Medicinal Chemistry I (MEDC 501) and Organic Chemistry of Drug Synthesis (MEDC 507) (6 hours);
- MEDC courses 600/700 level or BMS courses 700 level (6 hours)
- Elective Courses (6 hours)

**Other Academic Requirements**
A thesis is required.