Concentration - Pharmaceutics

B.S. in Pharmaceutical Sciences

Description

The B.S.P.S. degree may be taken as a practice or a nonpractice track. The practice track is designed to prepare a student for entry into the Pharm.D. professional program. The nonpractice tracks are designed to prepare a student for a pharmacy-related career (e.g., research or marketing) or graduate school.

Minimum Total Credit Hours: 142

Goals/Mission Statement

On the baccalaureate level, the school shall foster an environment where students can learn and apply the principles and theories related to the pharmaceutical sciences and acquire the knowledge, skills, and attitudes in their chosen discipline such that each can enter and succeed in a professional career in the pharmaceutical sciences, or continue studies in areas including, but not limited to, the Doctor of Pharmacy program or graduate studies in the pharmaceutical sciences.

General Education Requirements

The general education/core requirements for the B.S.P.S. degree include Engl 101 and Engl 102/Liba 102; Bisc 160, 161, 162, 163; Chem 105, 115, 106, 116, 221, 225, 222, 226; Phys 213, 223, 214, 224; Math 261; Spch 102 or 105; Econ 202; Math 115; 6 hours of behavioral/social sciences; 9 hours of humanities and fine arts, with at least 3 hours from each area.

Course Requirements

The third year (P3, the first professional year) requirements include Phcl 341 and 342 (Human Physiology/Pathophysiology), Phcl 343 (Biochemical Foundations of Therapeutics); Phar 330 (Pharmaceutical Calculations), Phar 331 and 332 (Basic Pharmaceutics); Phad 391 and 392 (Pharmacy Administration); Prct 350 (Pharmacy Orientation); Medc 317 (Pharmacogenetics and Pharmacoimmunology); and Phil 326 (Pharmacy Ethics).

Students must then complete either the fourth year (P4) practice track or one of the P4 nonpractice tracks; course requirements for P4 are described on the track sections.

Track - Nonpractice Curricular Tracks

Description

Completion of a B.S.P.S. nonpractice track (P4 year) may occur in the following areas of concentration-medicinal chemistry, pharmacology/toxicology, or drug discovery and development.

Goals/Mission Statement

The nonpractice track curricula are designed to provide sufficient background in a pharmaceutical science discipline to prepare the student for entry into a graduate degree program (M.S. or Ph.D.) in that respective discipline. They provide career preparation for students interested in pharmacy-related careers, but not desiring to become pharmacists.

General Education Requirements

General education course requirements are covered in the first two years of the B.S.P.S. degree program. Entry into each concentration consists of successful completion of the first three years of the B.S.P.S. degree program, followed by competitive admission.

Course Requirements

The nonpractice track curricula for concentrations in medicinal chemistry, pharmacology/toxicology, or drug discovery and development are identical to the practice track curriculum for the first three years, but differ dramatically in the fourth year. The required P4 courses are detailed under the specific concentrations.

Concentration - Pharmaceutics

Course Requirements

A concentration leading to the B.S. in Pharmaceutical Sciences/pharmaceutics consists of the successful completion of the first three years of the B.S. in Pharmaceutical Sciences curriculum, followed by competitive admission to the program and completion of the fourth-year courses given below.

Admission: The number of students accepted into the pharmaceutics program is limited by department resources. Competitive admission to the program depends on: a) A minimum GPA of 3.0 in pharmaceutics courses and 2.0 in nonpharmaceutics pharmacy courses. b) A successful departmental interview. c) A letter of recommendation from a School of Pharmacy faculty member. This curriculum is designed to provide the student with a broad pharmacy background with enhanced training in pharmaceutics. The analytical pharmaceutics course is a four-hour lecture/lab course that will provide the student with the basic skills needed to conduct pharmaceutics research in an industrial or university setting. The product development course will enhance the student's understanding of dosage form development. In the two-semester Problems in Pharmaceutics sequence, the student will conduct a research project under the direction of one of the department faculty, prepare monthly written progress reports, and present a seminar upon completion of the project. Successful completion of this program should prepare a student for graduate studies in pharmaceutics or an entry-level position in the pharmaceutical industry in product development, clinical supply manufacture, or production departments.