Courses

**PHAR 4499 Experimental Course: 1-6 semester hours.**
The content of this course is not described in the catalog. Title and number of credits are announced in the Class Schedule. Experimental courses may be offered no more than three times with the same title and content. Letter Graded. May be repeated.

**PHAR 9905 Introduction to Clinical Problem Solving: 2 semester hours.**
An introduction to the deductive, problem-based clinical reasoning process for identifying, preventing, and resolving drug-related problems. Letter Graded. PREREQ: First professional year. S

**PHAR 9906 Case Studies With Pharmacotherapy Lab I: 2 semester hours.**
Clinical problem solving related to patient cases and integration of skills and knowledge necessary for providing patient-centered pharmaceutical care. Letter Graded. PREREQ: Second professional year. F

**PHAR 9907 Case Studies with Pharmacotherapy Lab II: 2 semester hours.**
Clinical problem solving related to patient cases and integration of skills and knowledge necessary for providing patient-centered pharmaceutical care. Letter Graded. PREREQ: PHAR 9906. S

**PHAR 9908 Case Studies with Pharmacotherapy Lab III: 2 semester hours.**
Clinical problem solving related to patient cases and integration of skills and knowledge necessary for providing patient-centered pharmaceutical care. Letter Graded. PREREQ: PHAR 9907. F

**PHAR 9910 First Year Recitation: 0 semester hours.**
Scheduled time to attend professional seminars, course reviews and exams. May be repeated. Graded S/U. COREQ: First Professional Year. D

**PHAR 9911 Introductory Pharmacy Practice Experience I: 1 semester hour.**
Self-paced foundational learning and training for the Doctor of Pharmacy program. Letter Graded. D

**PHAR 9912 Introductory Pharmacy Practice Experience II: 1 semester hour.**
Competency-based experiential training and voluntary service in approved pharmacy practice settings. Letter Graded. PREREQ: PHAR 9911. D

**PHAR 9913 Introductory Pharmacy Practice Experience III: 1 semester hour.**
Competency-based experiential training and voluntary service in approved pharmacy practice settings. Letter Graded. PREREQ: PHAR 9912. D

**PHAR 9914 Introductory Pharmacy Practice Experience IV: 1 semester hour.**
Competency-based experiential training and voluntary service in approved pharmacy practice settings. Letter Graded. PREREQ: PHAR 9913. D

**PHAR 9920 Second Year Recitation: 0 semester hours.**
Scheduled time to attend professional seminars, course reviews and exams. May be repeated. Graded S/U. COREQ: Second Professional Year. D

**PHAR 9921 Biological Basis of Drug Actions I: 4 semester hours.**
Basic concepts in pharmacology. Letter Graded. PREREQ: First professional year. F

**PHAR 9922 Biological Basis of Drug Actions II: 5 semester hours.**
Basic concepts in Pharmacology. PREREQ: First professional year. Letter Graded. S

**PHAR 9923 Professional Development I: 0 semester hours.**
This course will provide a forum to demonstrate and document progressive achievement of desired program competencies throughout the didactic curriculum and introductory practice experiences. Student self-assessment and reflection on educational outcomes will be emphasized. Graded S/U. PREREQ: First professional year. S

**PHAR 9924 Physicochemical Basis of Drug Action: 3 semester hours.**
Concepts of physical and chemical properties of drugs and how these properties affect absorption, distribution, metabolism, excretion, and pharmacological actions. Letter Graded. PREREQ: First professional year. COREQ: BIOL 4449. F

**PHAR 9926 Basic Pharmacokinetics and Calculations: 4 semester hours.**
This course explores the fundamental principles of physical pharmacy, the mathematics associated with drug dispensing and compounding, and the pharmacokinetic principles related to ADME processes, the design and customization of therapeutic dosage regimens, and dosage individualization. Letter Graded. COREQ: PHAR 9926R. S

**PHAR 9926R Basic Pharmacokinetics and Calculations Recitation: 0 semester hours.**

**PHAR 9927 Dosage Form Design and Compounding with Lab: 4 semester hours.**
Principles, processes and techniques applied to design of therapeutic systems, including preparation, use and assessment of pharmaceutical dosage forms. Includes three hours of laboratory each week. Letter Graded. PREREQ: PHAR 9926. F

**PHAR 9927L Dosage Form Design and Compounding Lab: 0 semester hours.**
Principles, processes and techniques applied to design of therapeutic systems, including preparation, use and assessment of pharmaceutical dosage forms. Graded S/U. COREQ: PHAR 9927. S

**PHAR 9930 Third Year Recitation: 0 semester hours.**
Scheduled time to attend professional seminars, course reviews and exams. May be repeated. Graded S/U. COREQ: Third Professional Year. D

**PHAR 9931 Health Care I: 3 semester hours.**
Health care systems, social and behavioral aspects of pharmacy practice, and management. Letter Graded. PREREQ: First professional year. F, S, Su

**PHAR 9933 Professional Development II: 0 semester hours.**
This course will provide a forum to demonstrate and document progressive achievement of desired program competencies throughout the didactic curriculum and introductory practice experiences. Student self-assessment and reflection on educational outcomes will be emphasized. Graded S/U. PREREQ: Second professional year. S

**PHAR 9941 Introduction to Pharmacy Practice and Literature I with Lab: 4 semester hours.**
Introduction and socialization to the pharmacy profession. A general overview of the health care system, the role of pharmacy in health care, pharmacy law, experimental design, analysis, and career pathways within the profession. Letter Graded. PREREQ: First professional year. COREQ: PHAR 9941L. F

**PHAR 9941L Pharmacy Practice and Literature I Lab: 0 semester hours.**
Experiences in the retrieval, interpretation and analysis of literature and other sources of medical information. Design and development of research projects suitable for publication. Graded S/U. COREQ: PHAR 9941. F

**PHAR 9942 Introduction to Pharmacy Practice and Literature II: 3 semester hours.**
Introduction and socialization to the profession of pharmacy. A general overview of the health care system, the role of pharmacy in health care, pharmacy law, experimental design, analysis and career pathways within the profession. Letter Graded. PREREQ: PHAR 9941. S
PHAR 9943 Professional Development III: 1 semester hour.
This course will provide a forum to demonstrate and document progressive achievement of desired program competencies throughout the didactic curriculum and introductory practice experiences. Student self-assessment and reflection on educational outcomes will be emphasized. Graded S/U. PREREQ: Third professional year. S

PHAR 9944 Health Care II: 3 semester hours.
Health care systems, social and behavioral aspects of pharmacy practice, and management. Letter Graded. PREREQ: Fourth professional year. F, S, Su

PHAR 9944L Health Care II Lab: 1 semester hour.
Communication skills, multicultural awareness, and application of quality assurance methods. Application of principles of pharmacoeconomic and humanistic outcomes research to the evaluation of patient-centered care and the marketing and delivery of medication therapy management. Graded S/U. F, S, Su

PHAR 9945 Health Care III: 4 semester hours.
Health care systems, social and behavioral aspects of pharmacy practice, and management. Letter Graded. COREQ: PHAR 9945L. F, S, Su

PHAR 9945L Health Care III Lab: 0 semester hours.
Communication skills, multicultural awareness, and application of quality assurance methods. Application of principles of pharmacoeconomic and humanistic outcomes research to the evaluation of patient-centered care and the marketing and delivery of medication therapy management. Graded S/U. COREQ: PHAR 9945. F, S, Su

PHAR 9948 Pharmacy Law: 2 semester hours.
The study of federal and state statutes, regulations and court decisions which control the practice of pharmacy and drug distribution. Letter Graded. PREREQ: Third professional year. S

PHAR 9949 Human Physiology I: 4 semester hours.
First of a two semester sequence. Physiology of the nervous, muscular, and circulatory systems. Letter Graded. Cross-listed as BIOL 4449. F

PHAR 9949R Human Physiology I Recitation: 0 semester hours.
Recitation for PHAR 9949. Graded S/U. F

PHAR 9952 Pharmacotherapy Lab IV: 1 semester hour.
Integration of skills and knowledge necessary for providing pharmaceutical care. Emphasizes patient assessment and therapeutic monitoring and management. PREREQ: Third professional year. Graded S/U. D

PHAR 9956 Human Physiology II: 4 semester hours.
Physiology of the respiratory, renal, gastrointestinal, and endocrine systems. Includes studies of acid-base balance. Letter Graded. Cross-listed as BIOL 4456. PREREQ: BIOL 4449 or PHAR 9949. S

PHAR 9956R Human Physiology II Recitation: 0 semester hours.
Recitation for PHAR 9956. Graded S/U. S

PHAR 9961 Pharmacotherapy I: 2-5 semester hours.
An organ-system approach to the therapeutic management of selected disease states with an emphasis on the appropriate selection/monitoring of drug therapy and patient counseling. Letter Graded. PREREQ: Second professional year. D

PHAR 9962 Pharmacotherapy II: 2-5 semester hours.
An organ-system approach to the therapeutic management of selected disease states with an emphasis on appropriate drug selection, therapeutic drug monitoring, and patient counseling. Letter Graded. PREREQ: Second professional year. D

PHAR 9963 Pharmacotherapy III: 2-5 semester hours.
An organ-system approach to the therapeutic management of selected disease states with an emphasis on appropriate drug selection, therapeutic drug monitoring, and patient counseling. Letter Graded. PREREQ: Second professional year. D

PHAR 9964 Pharmacotherapy IV: 2-5 semester hours.
An organ-system approach to the therapeutic management of selected disease states with an emphasis on appropriate drug selection, therapeutic drug monitoring, and patient counseling. Letter Graded. PREREQ: Second professional year. D

PHAR 9965 Pharmacotherapy V: 2-5 semester hours.
An organ-system approach to the therapeutic management of selected disease states with an emphasis on appropriate drug selection, therapeutic drug monitoring and patient counseling. Letter Graded. PREREQ: Second professional year. D

PHAR 9966 Pharmacotherapy VI: 2-5 semester hours.
An organ-system approach to the therapeutic management of selected disease states with an emphasis on appropriate drug selection, therapeutic drug monitoring, and patient counseling. Letter Graded. PREREQ: Third professional year. D

PHAR 9967 Pharmacotherapy VII: 2-5 semester hours.
An organ-system approach to the therapeutic management of selected disease states with an emphasis on appropriate drug selection, therapeutic drug monitoring, and patient counseling. Letter Graded. PREREQ: Third professional year. D

PHAR 9968 Pharmacotherapy VIII: 2-5 semester hours.
An organ-system approach to the therapeutic management of selected disease states with an emphasis on appropriate drug selection, therapeutic drug monitoring, and patient counseling. Letter Graded. PREREQ: Third professional year. D

PHAR 9969 Pharmacotherapy IX: 2-5 semester hours.
An organ-system approach to the therapeutic management of selected disease states with an emphasis on appropriate drug selection, therapeutic drug monitoring, and patient counseling. Letter Graded. PREREQ: Third professional year. D

PHAR 9970 Pharmacotherapy X: 2-5 semester hours.
An organ-system approach to the therapeutic management of selected disease states with an emphasis on appropriate drug selection, therapeutic drug monitoring, and patient counseling. Letter Graded. PREREQ: Third professional year. D

PHAR 9971 Capstone Pharmacy: 2-5 semester hours.
Selective review of the pharmacy curriculum with emphasis on the optimization of complex pharmacotherapy regimens, medication therapy management, and therapeutic issues surrounding common disease states. Includes small group discussions, journal clubs, self-directed learning and interactive teaching methods. Letter Graded. PREREQ: Third professional year. D

PHAR 9971R Capstone Recitation: 0 semester hours.
Recitation for PHAR 9971. Graded S/U. D

PHAR 9981 Advanced Pharmacy Practice Experience: 7 semester hours.
Students are assigned to pharmacy practice sites including community, institutional, and clinical settings for experiential training. Requires reflection and presentation of cases for discussion. May be repeated up to 7 times. Letter Graded. PREREQ: Fourth professional year status. F, S, Su

PHAR 9982 Pharmacy Information Mastery I: 1 semester hour.
This course will re-enforce drug information and scientific literature evaluation skills taught earlier in the Doctor of Pharmacy curriculum. Students will develop and self-formulate distinct and focused clinical or practice-based pharmacy questions by thorough review and evaluation of scientific literature. F, S, Su

PHAR 9983 Pharmacy Information Mastery II: 1 semester hour.
This course will re-enforce drug information and scientific literature evaluation skills taught earlier in the Doctor of Pharmacy curriculum and demonstrated in Pharmacy Information Mastery I. PREREQ: Fourth professional year. Su
PHAR 9984 Pharmacy Information Mastery III: 1 semester hour.
This course will re-enforce drug information and scientific literature evaluation
skills taught earlier in the Doctor of Pharmacy curriculum and will include a
summative evaluation of skills taught in Pharmacy Information Mastery I & II.
PREREQ: Fourth professional year. S