

# PHARMACY (PHAR)

## PHAR 111 Pharmacy Orientation (1 Credits)

Pharmacy Orientation (1) Survey of the pharmacy profession with emphasis on history, ethics, careers, and professional organizations. One hour of lecture per week.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Dpt of Pharmaceu Sc& Env HS

## PHAR 112 Pharmacy Orientation (1 Credits)

Pharmacy Orientation (1) Survey of the pharmacy profession with emphasis on history, ethics, careers, and professional organizations. One hour of lecture per week.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

## PHAR 211 Pharmacy Applications (1 Credits)

Pharmacy Applications (1) Study of the fundamental principles underlying the science and practice of pharmacy in the United States. One hour of lecture per week. Prerequisites: PHAR 111, PHAR 112 and successful completion of freshman biology and chemistry courses.

**Prerequisite(s):** (PHAR 111 and PHAR 112)

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

## PHAR 212 Medical Terminology (1 Credits)

Medical Terminology (1) Programmed course of study building medical words from Greek and Latin prefixes, suffixes, word roots, and combining forms. Professional students are required to complete this course. One hour of lecture per week.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Dpt of Pharmaceu Sc& Env HS

## PHAR 401 Patient Assessment Laboratory (1 Credits)

Application of basic assessment techniques, terminology and the modifications caused by common diseases states and drug therapy. Topics include: acquisition of a comprehensive patient history, advanced cardiac life support, development of triage and referral skills, and use of OTC point of care.

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**Department:** Phar Praticce/Clinical Hlth Sci

## PHAR 402 Independent Study (1-4 Credits)

Students enrolled in this course will engage in independent study for a didactic pharmacy course that is in the pharmacy curriculum, but not available for enrollment during the current semester. Variable number of hours of lecture per week. Students may enroll in up to a total of 8 semester credit hours of Independent Study while in the professional pharmacy program. Special permission from the Associate Dean of Academic Affairs required for registration.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

## PHAR 404 Public Health I (1 Credits)

Introduction to public health concepts and applications. Promote health improvement, wellness and disease prevention in cooperation with patients, communities, at risk populations and other healthcare professionals. One Hour Lecture per week.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

## PHAR 405 Public Health II : Immunizations (1 Credits)

Principles and practice of immunizations delivery, storage and administration.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)College of Pharm & Hlth Sci

## PHAR 410 Principles of Pharmacotherapy (1 Credits)

Basic Principles of Pharmacotherapy (1) Introduction and orientation to theory and perspectives of clinical pharmacy practice with emphasis on content of patients' medical records, laboratory values, and diagnostic procedures. One hour of lecture per week. Prerequisite: First professional year standing in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)Pharmacy Practice

## PHAR 411 Pharmacy Practice I Laboratory (1 Credits)

Application of communication concepts presented in Phar 421. Three hours of laboratory per week. Prerequisite: First professional year standing in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

## PHAR 412 Pharmacy Practice II Lab (1 Credits)

Laboratory course with emphasis on the preparation and dispensing of prescriptions and the development and maintenance of patient medication profiles. Prerequisite: First professional year standing in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

## PHAR 413 Pharmaceutics I Lab (1 Credits)

Pharmaceutics I Laboratory (1) Demonstrations, case studies, recitation, presentations, and small group discussions to accompany PHAR 433. Three hours of laboratory per week. Prerequisite/Corequisite: Successful completion of or concurrent enrollment in PHAR 433.

**Prerequisite(s):** (PHAR 433 (may be taken concurrently))

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Dpt of Pharmaceu Sc& Env HS

## PHAR 414 Pharmaceutics II Lab (1 Credits)

Pharmaceutics II Laboratory (1) Demonstrations, case studies, recitation, simulations, presentations, and small group discussions to accompany PHAR 434. Three hours of laboratory per week. Prerequisite/Corequisite: Successful completion of or concurrent enrollment in PHAR 434.

**Prerequisite(s):** PHAR 434 (may be taken concurrently)

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

## PHAR 415 Introduction to Public Health (1 Credits)

Promote health improvement, wellness and disease prevention in cooperation with patients, communities, at risk populations and other healthcare professionals. One hour of lecture per week. Prerequisite: First professional year standing in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)Pharmacy Practice

## PHAR 416 Pharm Practice Experiences I (1 Credits)

Experiential course in which students will be exposed to service learning by participation in activities that develop personal and professional communication skills; improve sensitivity to populations of diverse backgrounds; increase awareness of role of other healthcare providers; and increase awareness of patient care. Prerequisite: First professional year standing in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)Pharmacy Practice

**PHAR 417 Pharm Practice Experiences II (1 Credits)**

Continued development of skills acquired in PHAR 416. Students will be exposed to and participate in supervised pharmacy practice activities allowing direct interaction with diverse patient populations encountered in community pharmacy. Prerequisites: First professional year standing in the professional pharmacy program and completion of PHAR 416.

**Prerequisite(s):** (PHAR 416)

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)Pharmacy Practice

**PHAR 418 Prin of Drug Action Lab I (1 Credits)**

Demonstrations, case studies, recitation, presentations, and small group discussions to accompany PHAR 438. Prerequisite: First professional year standing in the professional pharmacy program. Corequisite: Successful completion of or concurrent enrollment in PHAR 438.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)Dept of Pharmaceutical Sci

**PHAR 419 Prin of Drug Action II Lab (1 Credits)**

Demonstrations, case studies, recitation, presentations, and small group discussions to accompany PHAR 439. Prerequisites: PHAR 438 and PHAR 418. Co-requisite: Successful completion of or concurrent enrollment in PHAR 439.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)Dept of Pharmaceutical Sci

**PHAR 420 Computer Appls in Pharmacy (2 Credits)**

Computer Applications in Pharmacy (2) Designed to provide knowledge and skills necessary to use microcomputers in pharmacy practice management, with emphasis on the study and evaluation of computer information systems. Two hours of lecture per week. Prerequisite: First professional year standing in the College of Pharmacy and Health Sciences or consent of the instructor.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)Dept of Pharmaceutical Sci

**PHAR 421 Pharmacy Practice I (2 Credits)**

Development of pharmacist-provided patient care skills with focus on communicating and collaborating with prescribers, patients, caregivers and other involved healthcare providers to engender a team approach to patient care. Prerequisite: First professional year standing in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 422 Pharmacy Practice II (2 Credits)**

Principles of pharmacist-provided patient care skills with focus on the proper dispensing of medications prescribed (or recommended ) as part of the patient's care plan. Prerequisite: First professional year standing in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 423 Intro to Pharmacy Residencies and Fellowships (2 Credits)**

This course is designed to provide students with the opportunity to prepare and plan for post-graduate training and education opportunities such as residencies, fellowships, and graduate school. To meet course goals and objectives, students will participate in small group discussions, complete in-class activities, and develop a professional development plan.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)College of Pharm & Hlth Sci

**PHAR 424 Post Graduate Preparation Seminar (2 Credits)**

This course is designed to provide students with the opportunity to prepare and plan for post-graduate training and education opportunities such as residencies, fellowships, and graduate school. To meet course goals and objectives, students will participate in small group discussions, complete in-class activities, and develop a professional development plan.

**Prerequisite(s):** PHAR 423

**College/School:** Col of Science, Engr & Tech

**Department:** (R)College of Pharm & Hlth Sci

**PHAR 425 Manage Care Pharmacy Elective (2 Credits)**

This managed care pharmacy elective course will provide an overview of managed care pharmacy and an understanding of how managed care pharmacy impacts the healthcare system. The course will cover Managed Care Pharmacy and the US Health Care system, Prescription Drug Benefit, Formulary Management, Specialty Pharmacy, Drug Use Evaluation, Outcomes Research, Pharmacoecon

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)College of Pharm & Hlth Sci

**PHAR 426 Pathophysiology (2 Credits)**

Principles and concepts about human diseases and their pathophysiological nature. Emphasis will be placed on common significant diseases and evidence based medical science and practice.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 427 Pharmacy Health Care Systems (2 Credits)**

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)Pharmacy Practice

**PHAR 428 Pharmacology (2 Credits)**

Principles of pharmacology forming the basis for drug therapy.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 429 Emergency Preparedness (2 Credits)**

Students will be trained to provide pharmaceutical care and services in local and regional emergency situations. Prerequisites: Must be enrolled in the professional pharmacy program and obtain consent of the instructor.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 430 Biostatistic in Pharmacy (1-2 Credits)**

Biostatistics in Pharmacy (2) Provides students with an understanding of probability concepts, distributions of random variables, nonparametric methods, and other statistical methods used in biomedical, pharmaceutical, and health care research. Two hours of lecture per week. Prerequisite: First professional year standing in the College of Pharmacy and Health Sciences or consent of the instructor.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)Pharmacy Practice

**PHAR 431 Biostatistics and Research (3 Credits)**

Commonly used statistical tests and the basis for their use in health care research and delivery including the evaluation of statistical results. Prerequisite: First professional year standing in the professional pharmacy program or consent of the instructor.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)Pharmacy Practice

**PHAR 433 Pharmaceutics I Calculations (3 Credits)**

Pharmaceutics I - Calculations (3) Problems, calculations, and processes involving weights and measures, specific gravity, percentage, solutions, and alligations peculiar to pharmacy and related sciences. Three hours of lecture per week. Prerequisite: First professional year standing in the College of Pharmacy and Health Sciences. Corequisite: Concurrent enrollment in PHAR 413.

**Prerequisite(s):** PHAR 413 (may be taken concurrently)

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 434 Pharmaceutics II Dosage Forms (3 Credits)**

Pharmaceutics II - Dosage Forms I (3) Biopharmaceutics and the application of physicochemical principles with applications to drugs, dosage forms, and drug action. Three hours of lecture per week. Prerequisites: PHAR 413 and PHAR 433. Corequisite: Concurrent enrollment in PHAR 414.

**Prerequisite(s):** (PHAR 433 and PHAR 413 and PHAR 414 (may be taken concurrently))

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 437 Intro Pharm Hlth Care Systems (3 Credits)**

Introduction to Pharmacy and Health Care Systems (3) Provides students with an understanding of foundations of pharmacy and pharmacy practice, health care agencies/systems, and disease control/prevention. Three hours of lecture per week. Prerequisite: First professional year standing in the College of Pharmacy and Health Sciences or consent of the instructor.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)Pharmacy Practice

**PHAR 438 Principles of Drug Action I (3 Credits)**

An interdisciplinary course incorporating pathophysiology, pharmacology, and pharmaceutical/ medicinal chemistry concepts essential to understanding the basis of drug use in diseases of the nervous, cardiovascular, and genitourinary systems. Core concepts in pharmacology, mechanism of drug action in various categories, and the chemical basis of pharmacology will be presented. Prerequisite: First professional year standing in the professional pharmacy program. Co-requisite: Successful completion of or concurrent enrollment in PHAR 418.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)Dept of Pharmaceutical Sci

**PHAR 439 Principles of Drug Action II (3 Credits)**

Continuation of PHAR 438. Interdisciplinary course incorporating pathophysiology, pharmacology, and pharmaceutical/medicinal chemistry concepts essential to understanding the basis of drug use in diseases of the immune, respiratory, and gastrointestinal systems. Mechanism of drug action in various categories and the chemical basis of pharmacology will be presented. Prerequisites: PHAR 438 and PHAR 418. Co-requisite: Successful completion of or concurrent enrollment in PHAR 419.

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**Department:** (R)Dept of Pharmaceutical Sci

**PHAR 440 MCH Foundation (3 Credits)**

Maternal and child is study of the health of women, the pediatric, population (the fetus, infants, children, adolescents) and ther families. The Foundations course in MCH is a three-hour weekly introductory modular series that defines the scope of the field of MCH, its components and the basic core competencies that an MCH professional needs to posses.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Pharm Foundation

**PHAR 441 Biochemistry in Human Disease (4 Credits)**

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 442 Evidence-based Practice and Biostatistics (4 Credits)**

Principles of evaluation of primary literature and its implications in the provision of evidence- based pharmaceutical care and commonly used statistical tests and the basis for their use in health care research and delivery.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 451 General Pharmacy (5 Credits)**

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)College of Pharm & Hlth Sci