

Pharmacy (PHAR)

PHAR 200. Introduction to Pharmaceutical Sciences. 3 hours.

Introduces students to pharmaceutical sciences focusing on the process of drug discovery and development and different aspects of basic and applied sciences. Course Information:

PHAR 201. Pharmaceutical Care in the US. 3 hours.

Examines the role of pharmacies/pharmacists in U.S. healthcare, the relationship between pharmacy and society, including challenges to pharmacy equity in rural and urban communities and the opioid crisis, and efforts to reduce healthcare inequities. Course Information: Extensive computer use required. Hybrid course that integrates online and face-to-face classroom activities. *US Society course.*

PHAR 385. Remediation. 2-5 hours.

A remediation option for students who previously failed courses that are no longer taught in the PharmD curriculum. Course content will mirror content from the core course that the student failed. Course Information: May be repeated to a maximum of 15 hours.

PHAR 410. Integrated Physiology. 3 hours.

Reviews and integrates principles introduced in pre-requisite physiology, anatomy and biochemistry courses to human non-pathological and pathological situations. Active learning will promote problem-solving skills. Class Schedule Information: To be properly registered, students must enroll in one Lecture-Discussion and one Laboratory-Discussion.

PHAR 411. Introduction Pharmacy Practice. 4 hours.

Students will be introduced to the practice of pharmacy through a combination of lectures, on-campus introductory pharmacy practice experience (IPPE) simulations, and a week-long shadow experience (off-site) in a pharmacy practice setting. Course Information: Prerequisite(s): Current Illinois Pharmacy Technician License and completed college background check and drug screen and immunization records on file with the college. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory-Discussion and one Clinical Practice.

PHAR 412. Introductory Pharmacy Practice (IPPE): Community. 2 hours.

Overview of contemporary pharmacy practice in a community setting. Students will spend the majority of their time off-site at a community pharmacy enabling them to observe and develop the skills necessary in this setting. Course Information: Prerequisite(s): PHAR 411 and PHAR 431 and current Illinois Pharmacy Technician License and must comply with annual college background check and urine drug screen and must have immunization records complete and on file with college and additional site-specific requirements.

PHAR 413. Introductory Pharmacy Practice Experience (IPPE): Hospital. 2 hours.

Students will be provided an overview of contemporary pharmacy practice in a hospital setting. Students will spend most of their time engaged in actual (off-site at a hospital pharmacy) or simulated (on-site) hospital pharmacy practice activities. Course Information: Prerequisite(s): PHAR 411 and PHAR 431 and current Illinois Pharmacy Technician License and must comply with annual college background check and urine drug screen and must have immunization records complete and on file with college and additional site-specific requirements.

PHAR 414. Introductory Pharmacy Practice (IPPE): Introduction to Patient Care. 2 hours.

Introduction to the skills necessary to provide direct patient care. The goal of this course is to develop the skills necessary for communication of a pharmacotherapeutic recommendation both verbally and in writing. Course Information: Prerequisite(s): PHAR 412 and PHAR 413 and current Illinois Pharmacy Technician License and annual college background check and urine drug screen and immunization records complete and on file with college.

PHAR 422. Fundamentals of Drug Action. 4 hours.

Comprehensive course in chemical mechanisms of drug action. The major objective is for students to develop an understanding of the connection between the properties of chemical compounds and therapeutic action of drugs. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Discussion.

PHAR 423. Fundamentals of Drug Action II. 4 hours.

Covers more advanced topics of medicinal chemistry such as drug metabolism, energy metabolism, enzyme inhibitor drugs, signaling pathways as drug targets, discovery of natural product drugs and new frontiers in drug discovery. Course Information: Prerequisite(s): PHAR 422. Recommended background: Doctor of Pharmacy prerequisites including two years of undergraduate chemistry with laboratory and at least 3-credit hour biochemistry.

PHAR 431. Pharmaceutics I - Pharmaceutics Principles, Drug Delivery Systems, and Calculations. 3 hours.

Content will initially focus on basic pharmaceutics principles applicable to all drug delivery systems. Solution products including sterile product solutions will also be addressed. Students will also learn and practice basic pharmacy calculations. Class Schedule Information: To be properly registered, students must enroll in one Lecture-Discussion and one Laboratory-Discussion.

PHAR 432. Pharmaceutics II – Pharmaceutical Dosage Forms and Calculations. 2 hours.

Content will focus on basic pharmaceutics principles applicable to suspensions, emulsions, topicals, solids, and other dosage forms will be addressed. Pharmacy calculations relevant to dosage form preparation will also be taught. Prerequisite(s): PHAR 431.

PHAR 433. Pharmaceutics III – Complex Dosage Forms and Calculations. 2 hours.

Content will focus on basic pharmaceutics principles applicable to complex dosage forms (e.g., sterile products, extended release products, vaccines, etc.). Pharmacy calculations relevant to dosage form preparation will also be taught. Course Information: Prerequisite(s): PHAR 432.

PHAR 434. Pharmaceutics IV – Drug Delivery Systems Design and Calculations Competency. 2 hours.

Content will focus on dosage form design of sterile and non-sterile dosage forms; compounding; quality control; pharmacist's role in preparation, compounding, and dispensing of dosage forms; and pharmacy calculations, including a competency exam. Course Information: Prerequisite(s): PHAR 433.

PHAR 435. Pharmacokinetics. 3 hours.

Students will be introduced to basic principles of pharmacokinetics (e.g., absorption, distribution, biotransformation, excretion), factors influencing these parameters, and the use of common mathematical equations to calculate these parameters. Class Schedule Information: To be properly registered, students must enroll in one Lecture-Discussion and one Laboratory-Discussion.

PHAR 438. Introduction to Drug Information. 1 hour.

Content will focus on comparing and contrasting primary, secondary, and tertiary resources, including their relative value and trustworthiness. Students will gain skills necessary to conduct systematic searches and extract information from appropriate sources.

PHAR 439. Pharmacoepidemiology and Biostatistical Reasoning. 1 hour.

The principles of biostatistics and epidemiology relevant to pharmacy practice and pharmacoepidemiology (e.g., probability, descriptive and inferential statistics, measures of association and causality, and measures of excess risk) will be reviewed.

PHAR 440. Evidence-Based Medicine. 2 hours.

Focuses on the evaluation of clinical research in the literature and its application to patient care decisions. Application and interpretation of statistical methods will be reviewed in the context of study designs. Course Information: Prerequisite(s): PHAR 438. Corequisites: Requires concurrent registration in PHAR 439.

PHAR 461. Pharmacy and the U.S. Healthcare System. 2 hours.

Introduction to the philosophy and mission of the pharmacy profession, the evolution of practice, and elements of the U.S. Healthcare System.

PHAR 462. Social and Behavioral Pharmacy. 2 hours.

A survey of topics in the social and behavioral sciences as applied to pharmacy. The course emphasizes the broader social and health systems-related issues that surround and affect patient care provided by pharmacists.

PHAR 463. Personal and Professional Development. 2 hours.

Imparts knowledge, skills, abilities, behaviors and attitudes necessary for personal and professional competence and development, reinforcing the concepts of self-awareness, leadership, innovation, entrepreneurship, and professionalism. Course Information: Prerequisite(s): PHAR 461.

PHAR 464. Patient Safety. 1 hour.

Reviews topics related to patient safety. Prevalence and risk factors for error in healthcare settings, systematic approaches to risk assessment and error investigation, and methods to improve health system safety will be covered.

PHAR 465. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 1. 0 hours.

Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only.

PHAR 466. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 2. 0 hours.

Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only.

PHAR 467. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 3. 0 hours.

Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): PHAR 465 and PHAR 466.

PHAR 468. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 4. 0 hours.

Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): PHAR 465 and PHAR 466.

PHAR 469. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 5. 0 hours.

Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): PHAR 467 and PHAR 468.

PHAR 470. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 6. 0 hours.

Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): PHAR 467 and PHAR 468.

PHAR 471. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 7. 0 hours.

Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): PHAR 469 and PHAR 470.

PHAR 472. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 8. 0 hours.

Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): PHAR 469 and PHAR 470.