Courses

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.

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, topical, 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.

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. Pharmacoeconomics. 3 hours.
The principles of pharmacoeconomics relevant to pharmacy practice and pharmacoeconomics (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.
Focusing 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 469 and PHAR 470.

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.

PHAR 501. Pathophysiology, Drug Action, and Therapeutics (PDAT) 1: Self Care. 3 hours.
An introductory therapeutics course for the P1 student that addresses self-care principles. Topics will include wellness, prevention, and disease states that are commonly managed with nonprescription medications. Course Information: Prerequisite(s): PHAR 410 and PHAR 422 and PHAR 435.

PHAR 502. Pathophysiology, Drug Action, and Therapeutics (PDAT) 2: G1/Endocrine. 3 hours.
Covers the pathophysiology, chemistry, pharmacology, and therapeutic use of medications for the treatment of endocrine and gastrointestinal disorders. Course Information: Prerequisite(s): PHAR 410 and PHAR 422 and PHAR 435.
PHAR 503. Pathophysiology, Drug Action, and Therapeutics (PDAT)  
3: Renal, Electrolytes, and Nutrition. 3 hours.  
Covers the pathophysiology, chemistry, pharmacology, and therapeutic  
use of medications for the treatment of renal and electrolyte disorders.  
Principles of enteral and parenteral nutrition in adult and pediatric  
patients are also covered. Course Information: Prerequisite(s): PHAR 410  
and PHAR 422 and PHAR 423 and PHAR 435 and PHAR 501 and PHAR  
502.

PHAR 504. Pathophysiology, Drug Action, and Therapeutics (PDAT)  
4: Immunology/Respiratory. 4 hours.  
Covers basic biology of the immune system and its functions, common  
disorders of the immune system, chemistry and pharmacology of drugs  
used to treat immune disorders, and the therapeutic interventions for  
those disorders. Course Information: Prerequisite(s): PHAR 410 and  
PHAR 422 and PHAR 423 and PHAR 435 and PHAR 501 and PHAR  
502.

PHAR 505. Pathophysiology, Drug Action, and Therapeutics (PDAT)  
5: Cardiovascular. 4 hours.  
Covers the pathophysiology, chemistry, pharmacology, and therapeutic  
use of drugs used to treat common cardiovascular conditions. (e.g.,  
thromboembolic disease, hypertension, dyslipidemia, vascular disease,  
heart failure, and dysrhythmias). Course Information: Prerequisite(s):  
PHAR 410 and PHAR 422 and PHAR 423 and PHAR 435 and PHAR 504.

PHAR 506. Pathophysiology, Drug Action, and Therapeutics (PDAT)  
6: Infectious Diseases. 4 hours.  
Students will be exposed to the pathophysiology of various infections and  
the chemistry, pharmacology, therapeutic utility, and pharmacokinetic  
principles of systemic antibiotics, antifungals, and antivirals used to treat  
them. Course Information: Prerequisite(s): PHAR 410 and PHAR 422 and  
PHAR 423 and PHAR 435 and PHAR 504.

PHAR 507. Pathophysiology, Drug Action, and Therapeutics (PDAT)  
7: Neurology, Psychiatry, and Pain. 4 hours.  
Covers the pathophysiology, chemistry, pharmacology, and therapeutic  
use of drugs used to treat various neurologic and psychiatric disorders.  
Other topics covered include pain management and substance abuse/  
adoption. Course Information: Prerequisite(s): PHAR 410 and PHAR  
422 and PHAR 423 and PHAR 435 and PHAR 501 and PHAR 502; and  
PHAR 503 and PHAR 504 and PHAR 505 and PHAR 506.

PHAR 508. Pathophysiology, Drug Action, and Therapeutics (PDAT)  
8: Special Topics. 3 hours.  
Covers the pathophysiology, chemistry, pharmacology, and therapeutic  
use of drugs used to treat osteoarthritis, gout, disorders of the eye,  
and men's and women's health disorders as well as herbal and dietary  
supplements. Course Information: Prerequisite(s): PHAR 410 and PHAR  
422 and PHAR 423 and PHAR 435 and PHAR 501 and PHAR 502; and  
PHAR 503 and PHAR 504 and PHAR 505 and PHAR 506.

PHAR 509. Pathophysiology, Drug Action, and Therapeutics (PDAT)  
9: Hematology and Oncology. 3 hours.  
Covers the principles of oncology; pathophysiology of various cancers  
and hematologic disorders; and the chemistry, pharmacology, and  
therapeutic use of medications used to treat oncologic and hematologic  
disorders. Course Information: Prerequisite(s): PHAR 410 and PHAR 422  
and PHAR 423 and PHAR 435.

PHAR 510. Pathophysiology, Drug Action, and Therapeutics (PDAT)  
10: Advanced Disease Management. 3 hours.  
Challenges the students with complex multi-morbidity patient cases  
allowing them to apply pharmacologic, therapeutic, pharmacokinetic,  
and pharmacodynamics concepts learned in earlier course work. Course  
Information: Prerequisite(s): PMPR 440 and PHAR 501 and PHAR 502  
and PHAR 503 and PHAR 504 and PHAR 505; and PHAR 506 and  
PHAR 507 and PHAR 508 and PHAR 520.

PHAR 515. Patient Care: Institutional/Hospital. 2 hours.  
Students will further develop and apply clinical skills in the institutional/  
health system setting. Students will spend the majority of their time  
participating in direct patient care at an off-site institutional/hospital  
setting. Course Information: Prerequisite(s): PHAR 414 and PHAR 501  
and PHAR 502 and PHAR 503 and PHAR 504 and PHAR 505; and  
PHAR 506 and current Illinois Pharmacy Technician License and  
comply with annual college background check and urine drug screen and  
immunization records complete and on file with college and in addition  
comply with additional site-specific requirements.

PHAR 516. Patient Care: Ambulatory Care/Community. 2 hours.  
Students will further develop and apply clinical skills in the ambulatory  
care/community care setting. Students will spend the majority of their  
time participating in direct patient care at an on-site ambulatory care/  
community care setting. Course Information: Prerequisite(s): PHAR  
414 and PHAR 501 and PHAR 502 and PHAR 503 and PHAR 504 and  
PHAR 505; and PHAR 506 and current Illinois Pharmacy Technician  
License and annual college background check and urine drug screen and  
immunization records complete and on file with college and Additional  
site-specific requirements.

PHAR 520. Applied Pharmacetics, Pharmacokinetics, and  
Pharmacogenomics. 3 hours.  
Focuses on clinical application of basic concepts of pharmacetics,  
pharmacokinetics, and pharmacogenomics taught earlier in the  
curriculum. Previous concepts will be reinforced through clinical  
applications. Course Information: Prerequisite(s): PHAR 434 and PHAR  
435.

PHAR 565. Pharmacoeconomics and Payment. 2 hours.  
Emphasizes the principles and applications of pharmacoconomics  
and various financial and payment models that impact decision-making  
and resource allocation at the level of the patient, health care provider/  
anthropology, and organization.

PHAR 566. Management and Informatics. 2 hours.  
Reviews the management process and the use of health informatics,  
resources, and decision-making by managers to achieve organizational  
goals.

PHAR 567. Pharmacy Law and Ethics. 3 hours.  
Covers the federal and state laws pertaining to pharmacy practice in  
illinois, as well as ethical issues in patient care settings.

PHAR 601. Advanced Pharmacy Practice Experience (APPE):  
Ambulatory Patient Care. 4 hours.  
Advanced experiential course where students will further develop and  
apply skills related to ambulatory care. Students will spend six weeks  
in an ambulatory care setting for this Advanced Pharmacy Practice  
Experience (APPE). Course Information: Prerequisite(s): • Current Illinois  
Pharmacy Student Technician License • Completed college background  
check and drug screen • Completed assigned University LMS modules •  
immunization records complete and on file with college • Additional site-  
specific requirements • P4 standing.
PHAR 602. Advanced Pharmacy Practice Experience (APPE): Community Pharmacy. 4 hours.
Advanced experiential course where students will further develop and apply skills in the community pharmacy practice setting. Students will spend six weeks in a community pharmacy for this Advanced Pharmacy Practice Experience (APPE). Course Information: Prerequisite(s): • Current Illinois Pharmacy Student Technician License • Completed college background check and drug screen • Completed assigned University LMS modules • Immunization records complete and on file with college • Additional site-specific requirements • P4 standing.

PHAR 603. Advanced Pharmacy Practice Experience (APPE): Hospital/Health-System. 4 hours.
Advanced experiential course where students will further develop and apply skills in the hospital/health-system setting. Students will spend six weeks in a hospital/health-system setting for this Advanced Pharmacy Practice Experience (APPE). Course Information: Prerequisite(s): • Current Illinois Pharmacy Student Technician License • Completed college background check and drug screen • Completed assigned University LMS modules • Immunization records complete and on file with college • Additional site-specific requirements • P4 standing.

PHAR 604. Advanced Pharmacy Practice Experience (APPE): Inpatient Medicine Patient Care. 4 hours.
Advanced experiential course where students will further develop and apply skills related to inpatient medicine care. Students will spend six weeks in an inpatient direct patient care environment for this Advanced Pharmacy Practice Experience (APPE). Course Information: Prerequisite(s): • Current Illinois Pharmacy Student Technician License • Completed college background check and drug screen • Completed assigned University LMS modules • Immunization records complete and on file with college • Additional site-specific requirements • P4 standing.