

Pharmacy Practice (PP)

Course information contained within the Bulletin is accurate at the time of publication in July 2024 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

PP P012. Eff Comm/Pharmacist I. 1 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P013. Eff Comm/Pharmacist II. 1 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P136. IPPE 1. 1 to 3 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P140. Professional Practice. 1 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P142. Soc & Econ Aspcts/Hlthcare. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P145. Immunology/Biotechnology. 3 Credit Hours.

This course provides foundational knowledge of the functions of the immune system at the molecular, cellular, and anatomical levels. The first part of the course describes the innate and adaptive immune systems, their cells and anatomical structures, their intricate methods of cell-cell communication, and how immune responses can be mounted against a virtually unlimited array of pathogens while minimizing collateral damage to the host. Next, we will consider natural immunity and vaccination against specific pathogens, immune responses in cancer and transplantation, and the unwanted consequences of immune responses in inflammation, hypersensitivity, and autoimmune diseases, and the drugs and vaccines to treat those conditions. The last part of the course will introduce the biotechnologies that are fueling the rapid discovery and development of vaccines and immunotherapeutic agents for a wide variety of diseases.

Repeatability: This course may not be repeated for additional credits.

PP P146. Drug Information. 1 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P148. Introduction to Pharmacy Care. 2 Credit Hours.

This course is designed to provide a bridge between the pharmaceutical science courses and the clinical courses in the curriculum. During the first part of this course, students will learn how to select relevant data to assess in order to determine if a drug related problem (DLP) exists or could potentially occur. You will learn how to assess the history, physical exam findings and clinical laboratory tests to monitor the efficacy and safety of the patient's drug regimen. Students will also learn how to calculate the patient's creatinine clearance in order to accurately dose medications excreted by the kidney. The second part of the course has been designed to provide students with information and practice identifying and managing adverse drug reactions; and common problems that you will see in your IPPEs including pain management, anemia immunization schedules and selected OTC topics.

Repeatability: This course may not be repeated for additional credits.

PP P231. Intr/Pharmaceutical Care. 1 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P233. Path/Ther Cardiopulm I. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P234. Path/Ther Cardiopulm II. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P235. Pathophysiology/Therapeutics: Pediatrics. 1 Credit Hour.

This course is designed to help students develop an understanding of the appropriate therapeutic management of common pediatric disease states.

Repeatability: This course may not be repeated for additional credits.

PP P236. IPPE 2. 1 to 3 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P237. Path/Ther Endocr/Meta Di. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P239. Pharm Care Rec I. 1 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P246. Pharm Care Rec II. 1 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P248. Communication Skills. 1 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P250. Economics of Pharm Pract. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P254. Bio Stat/Med Lit Eval. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P260. Contemporary Pharmacy. 2 Credit Hours.

The focus of this core course is on issues surrounding the current practice of pharmacy in both the community and institutional setting. Lectures elaborate on some of the current legal issues in pharmacy practice, and new and innovative pharmacy practice paradigms. Topics relating to community practice include Gender Affirming Care and Transitions of Care. Students will become certified in Pharmacy-Based Immunizations. Hospital topics include IV incompatibilities, hazards and parenterals, introduction to parenteral nutrition, etc. Students will be required to write a two-page research paper on one of the recommended topics contemporary to pharmacy practice. Students will have to demonstrate proficiency in performing pharmacy calculations.

Degree Restrictions: Must be enrolled in one of the following Degrees: Doctor of Pharmacy.

College Restrictions: Must be enrolled in one of the following Colleges: Pharmacy.

Repeatability: This course may not be repeated for additional credits.

PP P270. Path/Ther Gastro-Nutri. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P280. Pharmacist Directed Care. 3 Credit Hours.

This course will introduce students to concepts used in assisting people who seek advice about self-care for health maintenance or common health related problems in ambulatory pharmacy settings. Identifying conditions amenable for self-care and providing individuals with a pharmaceutical care plan containing recommendations for various OTC products, homeopathic remedies, and dietary supplements will be emphasized.

College Restrictions: Must be enrolled in one of the following Colleges: Pharmacy.

Repeatability: This course may not be repeated for additional credits.

PP P310. Managed Care. 2 Credit Hours.

The information presented in the course deals with the predominant method of health insurance for the residents of the United States in the early 21st century. The course builds on and adds to the curricular material provided in two Temple University courses: "Social and Economic Aspects of Health Care" and "Economics of Pharmacy Practice." This elective course will incorporate new educational material in various aspects of managed care including, but not limited to: principles of insurance design, history and development of managed care, financial aspects, modeling and projections in disease prevalence and incidence, the marketplace and competition, negotiations with providers and the concepts of gatekeepers in primary care, reinsurance and practitioner "report cards." Pertinent current events issues will be briefly discussed as appropriate and as time permits. There will be two written assignments in the form of case studies to be solved during the semester.

College Restrictions: Must be enrolled in one of the following Colleges: Pharmacy.

Repeatability: This course may not be repeated for additional credits.

PP P312. ADRS Organ Systems Appr. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P313. Clin Pharmacokinetics. 1 to 3 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P314. Practical Public Health for Pharmacists. 3 Credit Hours.

There is a growing need for pharmacists to be trained in public health. This course will focus on the practical aspects of the 5 public health foundation disciplines: health services, epidemiology, biostatistics, social/behavior health, and environmental health. Although the public health role of the pharmacists has yet to be clearly defined, the pharmacist provides a wealth of health information as well as services and activities that are often public health related. The Accreditation Standards and Guidelines for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree across the United States stated that graduates should be competent to "promote the availability of effective health and disease prevention services and health policy through the ability to apply population-specific data, quality improvement strategies, informatics, and research processes to identify and solve public health problems and to help develop health policy." Furthermore, the American Association of Colleges of Pharmacy (AACP) in 2004 emphasized the importance of public health in the role of pharmacists in its Center for Excellence in Pharmacy Education (CAPE) Educational Outcomes. Included in these outcomes is the "promotion of health improvement, wellness, and disease prevention in cooperation with patients, communities, and at-risk populations" through the availability of "effective, quality health and disease prevention services" and advancement of public health policy.

College Restrictions: Must be enrolled in one of the following Colleges: Pharmacy.

Repeatability: This course may not be repeated for additional credits.

PP P315. Adv Clinical Practice I. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P316. Adv Clinical Practice II. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P317. The Pharmacists in Transitional Care. 2 Credit Hours.

This course is designed to give students an opportunity to examine the role of the pharmacist in patient care during times of transition in the healthcare system. The student will become aware of the challenges and disparities that may present at key points in the transition of care and learn optimal ways to improve the care process.

Repeatability: This course may not be repeated for additional credits.

PP P318. Palliative Care. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P319. Independent Community Pharmacy Ownership. 2 Credit Hours.

Provide current and up-to-date information on how to establish, operate and manage an independent community retail pharmacy that includes the application process with the city, state and the DEA and how to produce a comprehensive business and financial plan. Provide the study of different locations and their demographics. Discuss how to manage the construction phase and the development of a Pharmacy retail store. Discuss how to negotiate contracts with PBMs and drug suppliers. Discuss how to hire new employees and how to manage the Pharmacy business operation and workflow. Discuss customer service best practices. Discuss how to manage dispensing system, cash flow, accounting, advertising and public relations. Discuss daily legal matters, rules, regulations and inspections. Understand and manage Profit and Loss statements.

Repeatability: This course may not be repeated for additional credits.

PP P321. Pathophysiology/Therapeutics Neurology/Psychiatry. 3 Credit Hours.

This course will assist students in applying the pathophysiologic and therapeutic principles of selected neuropsychiatric conditions. Cases will be discussed to provide students with the opportunity to identify key subjective/objective information and to develop appropriate, evidence-based, drug related assessments and care plans. Emphasis will be placed on the students' ability to interpret pertinent data, to identify drug related problems, and to develop therapeutic plans with goals, monitoring parameters and counseling points.

College Restrictions: Must be enrolled in one of the following Colleges: Pharmacy.

Repeatability: This course may not be repeated for additional credits.

PP P323. Pathophysiology/Therapeutics of Oncology and Immunology. 3 Credit Hours.

The pathophysiology and clinical manifestations of selected immunologic and oncologic disorders will be presented as a basis for the discussion of evidence-based drug therapy for these diseases. The rational use of supportive therapy in the management of patients receiving chemotherapy will be covered. Monitoring therapeutic outcomes will be emphasized.

College Restrictions: Must be enrolled in one of the following Colleges: Pharmacy.

Repeatability: This course may not be repeated for additional credits.

PP P325. Pathophysiology/Therapeutics - Infectious Diseases. 3 Credit Hours.

This course is designed to increase the students understanding of the pathophysiology and appropriate therapy of common infectious diseases. The students will be expected to use pathophysiologic information and drug therapy characteristics to develop and support a pharmacotherapeutic plan to treat each disease state. Emphasis will be placed on a systematic approach that can be applied to the treatment of most infectious diseases.

College Restrictions: Must be enrolled in one of the following Colleges: Pharmacy.

Repeatability: This course may not be repeated for additional credits.

PP P330. Path/Ther Gastro-Nutritn. 1 or 2 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P332. Path/Ther Imm/Derm/Ophth. 1 to 3 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P334. Path/Ther cardiopulm III. 1 to 3 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P336. IPPE 3. 1 to 3 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P338. Pathophysiology/Therapeutics - Gastroenterology/Nutrition and Renal Disorders. 3 Credit Hours.

The pathophysiology and clinical manifestations of selected gastrointestinal; hepatic; and acute and chronic renal disorders will be presented as a basis for the discussion of evidence-based drug therapy for diseases affecting these organ systems. The effect of liver and renal disease on drug disposition and elimination will be emphasized. Principles of fluid and electrolyte therapy; enteral and parenteral nutrition will be covered. Monitoring therapeutic outcomes is also emphasized.

College Restrictions: Must be enrolled in one of the following Colleges: Pharmacy.

Repeatability: This course may not be repeated for additional credits.

PP P340. Case Stud/Infectious Dis. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P341. Pharmacy Law. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P342. Prin & Prac Evid Based Med. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P344. Advanced Diabetes Management. 2 Credit Hours.

The purpose of this course is for students to further advance their comprehensive knowledge of the pharmaceutical care of patients with diabetes mellitus. Students will participate in lectures and investigative assignments to fully understand the complexity of diabetes care. These advanced topics and assignments will expose students to experiences in which they will gain an appreciation for the intricacies involved with diabetes management, develop empathy for patients with diabetes, construct evidence-based treatment plans, and enhance oral and written communication skills. This course will build on principles learned in their 2nd year and will serve as a platform for shaping future pharmacists to provide excellent care for patients with diabetes.

Repeatability: This course may not be repeated for additional credits.

PP P346. Pract Politics & Pharm. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P347. Pharm Care Rec III. 1 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P348. Pharm Care Rec IV. 1 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P350. Adv Radiopharmaceuticals. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P351. Pharmacist Introduction to the Pharmaceutical Industry. 2 Credit Hours.

The pharmaceutical industry represents an opportunity for pharmacists to use their therapeutic expertise globally and offers a unique career path. Interest in this career path has increased in the past 10 years with more students applying for postgraduation training opportunities in the pharmaceutical industry. The aim of this course will be to increase students' exposure to postgraduate residency and fellowship opportunities in the pharmaceutical industry, allow them to explore various pharmacists' roles in this space, and prepare them for their desired professional advancement. The course will provide a broad introduction to the pharmaceutical industry. Reviews of the major pharmaceutical company functions will be covered. Emphasis will be placed on the drug development process, medical affairs/medical information, drug safety/pharmacovigilance, and marketing.

Class Restrictions: Must be enrolled in one of the following Classes: Third Year Pharmacy.

Degree Restrictions: Must be enrolled in one of the following Degrees: Doctor of Pharmacy.

Repeatability: This course may not be repeated for additional credits.

PP P352. Economics of Pharm Pract. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P353. Pharmacoeconomics. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P354. Pharm Care/Ambulatory Pr. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P355. Drug Interactions: Mechanisms, Analysis, Clinical Applications. 2 Credit Hours.

This course is designed to review the detailed mechanisms of drug interactions focusing on analysis of the clinical significance of each interaction. Students will learn how to develop evidence-based, patient specific pharmacy care plans to manage drug interactions.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Pharmacy.

College Restrictions: Must be enrolled in one of the following Colleges: Pharmacy.

Repeatability: This course may not be repeated for additional credits.

PP P356. Spec Topic in Oncology. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P357. Clinical Nutrition. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P358. Marketing Health Care Serv. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P359. Prin of Clin Immunology. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P360. App/Educational Methods. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P361. Phar Pract/Geriatric Pat. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P362. Selected Top:Inf Disease. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P363. Food & Drug Law. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P364. Food & Drug Law II. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P365. Outcomes, Diver Phar Prof. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P366. Seminar I. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P367. Seminar II. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P368. Intro to Nuclear Pharm. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P369. Managed Care Pharmacy. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P370. Sem/Pharmaceutical Ethic. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P371. Drugs, Devices & Consumers. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P372. Curr Issues Med Errors. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P373. Home Infusion Therapy. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P374. Pediatric Therapeutics. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P375. Sur/Radiopharmaceuticals. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P376. Women's Health Care. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P377. Curr Prob-Pharmacotherapy. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P378. Therap Issues Crit Care. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P379. Cont Cncpts/Parentarels. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P380. Case Studies ADRS. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P381. Clin Drug Development. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P382. Prin/Pract Clin Research. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P383. Good Clinical Practices. 3 Credit Hours.

The focus of this course on current good clinical research practices for the development of eventual marketing to the health care community will be on quality and integrity in the conduct of a clinical trial through compliance with existing regulatory standards.

Repeatability: This course may not be repeated for additional credits.

PP P384. Med Error Sar & Contrl Pln. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P385. Introduction to Medical Writing. 2 Credit Hours.

In this course, students will be introduced to the field of medical writing. Students will learn and practice researching and writing different deliverables, including abstracts, manuscripts, slide decks, and posters. Students will have the opportunity to learn the essentials of AMA (American Medical Association) Style and to hone their writing skills by writing weekly reflections in addition to several assigned written projects and presentations.

Class Restrictions: Must be enrolled in one of the following Classes: Third Year Pharmacy.

Degree Restrictions: Must be enrolled in one of the following Degrees: Doctor of Pharmacy.

Repeatability: This course may not be repeated for additional credits.

PP P386. Pharmacoepidemiology. 2 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P387. Veterinary Pharmacy. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P388. Clinical Trial Mgt. 3 Credit Hours.

Repeatability: This course may not be repeated for additional credits.

PP P389. Research in Clin Pharm. 1 to 3 Credit Hour.

Repeatability: This course may be repeated for additional credit.

PP P390. Spec Problems/Clin Pharm. 1 to 3 Credit Hour.

Repeatability: This course may not be repeated for additional credits.

PP P391. Community Pharmacy Practice. 2 Credit Hours.

This course will review common topics in community pharmacy that will enhance the students' skills and proficiency when working in community pharmacy. The course will focus on non-dispensing (enhanced patient care) services and it will prepare students with the skills to be able to develop and lead the implementation of enhanced patient care services in the community.

Class Restrictions: Must be enrolled in one of the following Classes: Third Year Pharmacy.

Degree Restrictions: Must be enrolled in one of the following Degrees: Doctor of Pharmacy.

Repeatability: This course may not be repeated for additional credits.

PP P406. APPE-In-Patient. 5 to 6 Credit Hours.

The Clinical Inpatient APPE is a 4th year rotation that exposes students to inpatient pharmacy practice. Students will work directly alongside faculty members in various inpatient clinical settings and will be involved in all aspects of patient care, including developing and implementing therapeutic plans, patient counseling, and education. Students will work collaboratively with other professions to optimize drug therapy, with an emphasis on acute disease management. Students will receive individualized coaching to improve their clinical skills. Students will also participate in topic discussions on relevant clinical issues and present an inservice and journal club.

Degree Restrictions: Must be enrolled in one of the following Degrees: Doctor of Pharmacy.

Repeatability: This course may be repeated for additional credit.

PP P407. APPE-Ambulatory. 5 to 6 Credit Hours.

The Clinical Ambulatory Care APPE is a 4th year rotation that exposes students to ambulatory care pharmacy practice. Students will work directly alongside faculty members in various outpatient clinical settings and will be involved in all aspects of patient care, including developing and implementing therapeutic plans, patient counseling, and education. Students will work collaboratively with other professions to optimize drug therapy, with an emphasis on chronic disease management. Students will receive individualized coaching to improve their clinical skills. Students will also participate in topic discussions on relevant clinical issues and present an inservice and journal club.

Degree Restrictions: Must be enrolled in one of the following Degrees: Doctor of Pharmacy.

Repeatability: This course may be repeated for additional credit.

PP P408. APPE-Community. 5 to 6 Credit Hours.

Repeatability: This course may be repeated for additional credit.

PP P409. APPE-Institutional. 5 to 6 Credit Hours.

Repeatability: This course may be repeated for additional credit.

PP P410. APPE-Elective. 5 to 6 Credit Hours.

Repeatability: This course may be repeated for additional credit.

PP P411. APPE-Elective. 5 to 6 Credit Hours.

Repeatability: This course may be repeated for additional credit.

PP P412. APPE-Elective. 5 to 6 Credit Hours.

Repeatability: This course may not be repeated for additional credits.