

# Pharmacy Practice (PMPR)

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## Courses

### **PMPR 300. Undergraduate Research Experience in Pharmacy Practice. 1-3 hours.**

Course is being developed to support the academic environment for undergraduate students at UIC. The research experience will be under the guidance of a faculty member who will act as a research supervisor. Course Information: Satisfactory/Unsatisfactory grading only. May be repeated. Application of credit toward the degree is contingent upon the approval of the student's college and/or department. Prerequisite(s): Consent of the instructor supervising the research experience. Open only to sophomores, juniors, and seniors.

### **PMPR 315. Foundations in Rural Family and Community Healthcare I. 1 hour.**

Designed to introduce health care professions students to concepts and issues related to rural public health and primary care practice. Course Information: Prerequisite(s): Acceptance into the Rural Health Professions (RPHARM) Program.

### **PMPR 316. Foundations in Rural Family and Community Healthcare II. 1 hour.**

Introduces students to concepts of health resources development, rural mental health as well as community based research in rural communities. Course Information: Prerequisite(s): Acceptance into the Rural Health Professions (RPHARM) Program and successful completion of PMPR 315.

### **PMPR 317. Foundations in Rural Family and Community Healthcare III. 1 hour.**

Allows students to apply what was learned in the first year by participating in hands on community health education. In addition, clinical aspects of rural healthcare are introduced. Course Information: Prerequisite(s): Acceptance into the Rural Health Professions (RPharm) Program AND successful completion of RHP Year 1.

### **PMPR 318. Foundations in Rural Family and Community Healthcare IV. 1 hour.**

Students apply what was learned in the first year by participating in hands on community health education. Course Information: Prerequisite(s): Acceptance into the Rural Health Professions (RPHARM) Program; and successful completion of PMPR 315, PMPR 316 and PMPR 317.

### **PMPR 319. Foundations in Rural Family and Community Healthcare V. 1 hour.**

The fifth course in a series of six courses of supplementary education for PharmD students accepted into the Rural Health Professions (RHP) Program. Course Information: Prerequisite(s): Acceptance into the Rural Health Professions (RPHARM) Program AND successful completion of RHP Years 1 and 2.

### **PMPR 320. Foundations in Rural Family and Community Healthcare VI. 1 hour.**

The sixth course in a series of six courses of supplementary education for PharmD students accepted into the Rural Health Professions (RHP) Program. Course Information: Prerequisite(s): Acceptance into the Rural Health Professions (RPHARM) Program AND successful completion of RHP Years 1 and 2.

### **PMPR 321. Capstone Project in Rural Healthcare. 2 hours.**

The capstone project is a community-based research project which requires study of their chosen community's social, economic, cultural, organizational and political structure. Course Information: Prerequisite(s): Acceptance into the Rural Health Professions/RPHARM Program and successful completion of Years 1-3 of the RPHARM series of courses.

### **PMPR 326. Topics for Professional Student Enrichment. 1 hour.**

Students will meet at the beginning of the semester with the course instructor to review and select topics from a schedule of topics. Topics chosen will reflect 15 hours of class time as well as written journals. Course Information: Prerequisite(s): PHAR 341.

### **PMPR 327. Lifestyle Modifications in Disease Management. 1 hour.**

Provides students with the background and practical knowledge for teaching their patients the best ways to become aware of and implement specific lifestyle modifications for their disease states. Course Information: Asynchronously delivered on Blackboard using Panopto videos. Prerequisite(s): PHAR 501 and PHAR 502 and PHAR 503 and PHAR 504. Co-requisites: Concurrently enrolled in P2 Spring or higher courses.

### **PMPR 328. Evidence Based Phytotherapy. 2 hours.**

Provides a basis for the evidenced-based evaluation of phytotherapy and other Complementary and Alternative Medicine (CAM) modalities.

### **PMPR 329. The Dean's Seminar: Career Insights from Pharmacy Leaders. 1 hour.**

Features distinguished guest speakers, with different backgrounds who share their real-world career experiences and advice. Guest speakers include established leaders and rising stars from many different pharmacy disciplines. Course Information: Satisfactory/Unsatisfactory grading only.

### **PMPR 330. Journal Club and Advanced Literature Analysis. 1 hour.**

A course designed to familiarize students with more advanced study design and statistical concepts commonly used in the medical literature. Course Information: Prerequisite(s): P3 standing and completion of PHAR 440.

### **PMPR 334. Mindfulness Practice. 1 hour.**

Mindfulness is the practice of focusing in the present moment, without judgment or bias. In this course, students will learn about the science and theory of mindfulness and practice techniques during class time.

### **PMPR 335. Academic Advanced Pharmacy Practice Experience. 4 hours.**

An APPE occurring across the curriculum that exposes fourth-professional year students to academic pharmacy. Course Information: May be repeated to a maximum of 8 hours. Prerequisite(s): P4 level student standing.

### **PMPR 336. Concepts in Drug Development: From Bench to Bedside. 2 hours.**

Designed to give clinician-scientists an overview of the drug development process, from bench to bedside. Course Information: Offered online only. Prerequisite(s): Students will be required to search and evaluate scientific literature independently. PharmD candidates must be current second- or third-year students. First-year pharmacy students or graduate students of any year require instructor approval.

### **PMPR 337. Spanish for Pharmacists. 2 hours.**

This online elective course is designed to provide students with the fundamental knowledge they will need to interact with a Spanish speaking patient.

**PMPR 338. Management of the HIV Patient. 2 hours.**

Incorporates team and case-based learning. Provides an opportunity to advance HIV understanding and clinical application. Course Information: Prerequisite(s): PHAR 403.

**PMPR 339. Exploration of Telemedicine in Pharmacy Practice. 2 hours.**

Provides an overview of telemedicine and its role in the healthcare system. Class Schedule Information: To be properly registered, students must enroll in one Lecture-Discussion, one Laboratory, and one Clinical Practice.

**PMPR 345. Clinical Toxicology. 3 hours.**

Basic and applied concepts in clinical toxicology including general approach, poisoning prevention measures, retrieval and evaluation of toxicology literature, substance abuse issues and practice site specific toxicology concerns. Course Information: Prerequisite(s): Enrollment in the Doctor of Pharmacy program.

**PMPR 347. Advanced Transplant Therapeutics. 2 hours.**

Builds upon the fundamentals of solid organ transplantation established in PHAR 504. Course Information: Prerequisite(s): PHAR 504.

**PMPR 348. Advanced Topics in Ambulatory Care. 2 hours.**

Provides pharmacy students with advanced knowledge of the most common chronic conditions encountered in ambulatory care, a review of practice management and care delivery models, and postgraduate training and certification recommended. Course Information: Prerequisite(s): PHAR 505 and PHAR 506.

**PMPR 349. Case Based Infectious Diseases. 2 hours.**

Provides an opportunity to advance infectious disease understanding and clinical application. Students will be responsible for providing therapeutic recommendations based on evidence based medicine. Course Information: Prerequisite(s): PHAR 506, current P3 standing.

**PMPR 355. Seminar in Pharmacy Research. 1 hour.**

A weekly 1 hour research seminar provided by the College of Pharmacy faculty who are currently conducting clinical and/or basic science research. Course Information: Prerequisite(s): Enrollment in the Doctor of Pharmacy Program.

**PMPR 356. The Role of the Pharmacist in Tobacco Cessation. 2 hours.**

The intent of this elective course is to provide students a very in-depth knowledge base in tobacco cessation (including Electronic Nicotine Delivery Systems), skills for counseling, and detailed "how to" information on specific counseling techniques.

**PMPR 357. Natural and Recombinant Plasma-Derived Therapeutics. 1 hour.**

Introduction to plasma-derived therapeutics including albumin, immune globulins, and factor products. Production, viral safety, and clinical applications will be covered. Course Information: Prerequisite(s): P3 class standing.

**PMPR 358. Pharmacotherapeutic Issues in Women's Health. 1 hour.**

Team taught case-based pharmacotherapeutic lecture course related to women's health. Course Information: Prerequisite(s): PHAR 508.

**PMPR 359. Topics and Issues in Clinical Post-Graduate Training Programs. 2 hours.**

Increases PharmD students' knowledge and professionalization about post-graduate training. Students will "shadow" residents or fellows during non-class times, overnight and weekends while the resident or fellow is on call. Prerequisite(s): PHAR 501 and PHAR 502 and second or third year Doctor of Pharmacy student on the Chicago campus in good academic standing. Class Schedule Information: To be properly registered, students must enroll in one Clinical Practice and one Lecture.

**PMPR 360. Clinical Aspects of Drug Interactions, Metabolism and Pharmacogenetics. 2 hours.**

Clinical perspective in interpreting drug interaction/metabolism and pharmacogenetic data from the literature; application of the information in practice. Hands-on opportunities to manage drug interactions using real-life cases. Course Information: Prerequisite(s): Third year standing in the Doctor of Pharmacy program or above; or consent of the instructor.

**PMPR 361. Introduction to Public Health: Concepts and Applications in Pharmacy. 2 hours.**

Introduces pharmacy students to major concepts in public health. Emphasizes an interdisciplinary team that focuses on the well being of the population.

**PMPR 362. Clinical Aspects of Diabetes Mellitus. 2 hours.**

Discussion and project-based coursework covering more detailed information about diabetes mellitus for students interested in learning more about diabetes beyond the required Principles of Drug Action and Therapeutics course. Course Information: Prerequisite(s): PHAR 502.

**PMPR 363. Primary Care Clinical Nutrition. 2 hours.**

Students will evaluate the clinical importance of nutritional intervention, and its practical applications for chronic disease prevention and management such as cancer, hypertension, hyperlipidemia, diabetes, and obesity.

**PMPR 368. Media's Influence on Critical Care and Emergency Medicine. 2 hours.**

Designed to engage pharmacy students in exploring media's view, presentation, perception, and subsequent influence on the public's understanding of critical care and emergency medicine. Course Information: Prerequisite(s): PHAR 501 and PHAR 502 and PHAR 503 and PHAR 504 and PHAR 505 and PHAR 506 and completion of all core courses within the program's first year.

**PMPR 370. Pharmacy Grand Rounds. 1 hour.**

A weekly series of contemporary topics on pharmacy practice will be presented. Course Information: Satisfactory/Unsatisfactory grading only. May not be repeated for credit. Mandatory attendance. Prerequisite(s): Enrollment in the Doctor of Pharmacy program. Restricted to first year pharmacy students.

**PMPR 371. Professional Development Seminar I. 1 hour.**

A weekly seminar series designed to draw select second year professional students together to discuss educational issues related to the second professional year. Course Information: Credit is not given for PMPR 371 if the student has credit in BPS 381 or PMAD 381 or PMMP 381. Prerequisite(s): Completion of the first year of the Doctor of Pharmacy program; Student must be listed as an advisee of the instructor.

**PMPR 376. Applied Research Methods and Skill Development. 2 hours.**

Prepares students to be involved in basic, clinical, or quality improvement research. Students will develop a research protocol, create an abstract, and prepare a final research presentation.

**PMPR 377. Professional Development for Pharmacists. 1 hour.**

Designed to develop the skills necessary for the professional development of future pharmacists: resume writing, interview preparation, written correspondence, and verbal presentation skills. Course Information: Prerequisite(s): Enrollment in the Doctor of Pharmacy program.

**PMPR 378. Pediatric Therapeutics. 2 hours.**

Drug therapy of common pediatric disease states, emphasizing special pediatric considerations in the areas of infectious disease, psychiatry, hematology, neonatology. Course Information: Prerequisite(s): Completion of the second year of the Doctor of Pharmacy Program.

**PMPR 379. Advanced Psychiatric Pharmacotherapeutics. 2 hours.**

A synchronous, in-person course that focuses on psychiatric conditions through review of guidelines, literature, therapeutics, patient cases, and psychotropic counseling. The course will progress from faculty led to student led. Course Information: Prerequisite(s): PHAR 507.

**PMPR 380. Undergraduate Research in Pharmacy Practice. 1-3 hours.**

Investigation, under the direction of one or more faculty members, of a problem of limited scope. May require literature research related to the research project. Course Information: May be repeated. A maximum of 6 hours of credit is allowed per department. A total of not more than 8 hours of 380 and 390 numbered courses in the college may be applied toward the 12 hours of PharmD professional electives. Prerequisite(s): Minimum cumulative grade point average of 2.50 and consent of the instructor, department head, and Associate Dean for Student Affairs.

**PMPR 381. Chronic Kidney Disease (CKD) - Interventions and Treatment. 2 hours.**

Identification and treatment of patients with chronic kidney disease utilizing a multifactorial approach to attain goals set by Kidney Disease Outcome Quality Initiatives (KDOQI), Improving Global Outcomes (KDIGO), ADA, ACC-AHA, and lipid guidelines. Course Information: Prerequisite(s): PHAR 503.

**PMPR 382. Ethical Considerations in the Practice of Pharmacy. 2 hours.**

Students will review ethical principles, identify ethical dilemmas, analyze case studies, and engage in role-playing. Individual and group written/oral presentations will be required. Course Information: Prerequisite(s): PHAR 404.

**PMPR 383. Managed Care Pharmacy. 2 hours.**

Covers fundamental concepts in managed care pharmacy and provide a basic understanding of how managed care pharmacy impacts the US health care system. Goal is to provide students with foundational knowledge that they can apply in career.

**PMPR 385. Special Topics of Current Interest in Pharmacy Practice. 1-4 hours.**

Course offered by faculty or a visiting lecturer on a selected topic of current interest. Available on an experimental basis for two offerings only. Course Information: May be repeated. Students may register in more than one section per term. Prerequisite(s): Good academic standing and consent of the instructor.

**PMPR 390. Special Projects in Pharmacy Practice. 1-2 hours.**

Special projects within the departmental discipline. Defined and terminal project goals are achieved through independent study. Course Information: May be repeated. A maximum of 4 hours of 390 credit is allowed in all departments. A total of not more than 8 hours of 380 and 390 numbered courses in the college may be applied toward the 12 hours of PharmD professional electives. Prerequisite(s): Consent of the instructor, department head, and Associate Dean for Student Affairs.

**PMPR 430. Critical Care I. 2 hours.**

Advanced pharmacotherapeutics course that will concentrate on the medical management and the pharmacist's role in the management of the critically ill patient. This course will also incorporate and apply pharmacokinetic principles. Course Information: Prerequisite(s): HAR 401 and PHAR 402 and PHAR 403 and PHAR 404 and PHAR 405 and PHAR 406; and PHAR 407 and PHAR 408; and completion of the second year of the program Beginning Spring 2019: Concurrent enrollment in PHAR 510.

**PMPR 436. Strategic Business Planning. 1 or 2 hour.**

Strategic business planning is crucial for establishing successful clinical practices or programs. Offers a comprehensive exploration of the essential components of developing a robust business plan tailored to clinical pharmacy. Course Information: Prerequisite(s): Preferred second or third professional year Doctor of Pharmacy students.

**PMPR 440. Applied Pharmacokinetics. 2 hours.**

An elective course demonstrating practical application of pharmacokinetic principles. Course Information: Previously listed as PMPR 340. Scientific calculator required. Prerequisite(s): PHAR 401, PHAR 402, PHAR 403, PHAR 404, PHAR 405, and PHAR 406 or consent of the instructor.

**PMPR 442. Introduction to Specialty Pharmacy. 2 hours.**

Specialty pharmacy practice model and how it impacts access and management of drugs used to treat complex and chronic disease. Course Information: Prerequisite(s): P2 or P3 standing. Class Schedule Information: To be properly registered, students must enroll in one Discussion/Recitation and one Lecture.

**PMPR 443. Advanced Specialty Pharmacy: Administration and Operations Management. 2 hours.**

Advanced topics in specialty pharmacy operations management and will build off of the information learned from PMPR 442. Course Information: PMPR 442 and PHAR 565.

**PMPR 445. Interprofessional Approaches to Health Disparities (IAHD) I. 2 hours.**

Designed to build upon the concepts of health disparities, social determinants of health, public health, Interprofessional education, quality improvement and community-based participatory research across the PharmD curriculum. Course Information: Prerequisite(s): Successful completion of PharmD Curriculum through P2 year. Completion of competitive application packet for the course.

**PMPR 446. Interprofessional Approaches to Health Disparities (IAHD) II. 2 hours.**

Equips learners with essential skills to improve health care for underserved populations and transform health disparities through interprofessional education, research and collaborative practice. Prerequisite(s): PMPR 445.

**PMPR 450. Medical writing. 1 hour.**

Students will access weekly online modules that will cover the fundamentals of writing, editing, and publishing scientific medical information. Prerequisite(s): PHAR 440.

**PMPR 485. Concentration Research. 2 hours.**

Investigation, under the direction of one or more faculty members, of a problem of limited scope. May require literature research related to the research project. Course Information: May be repeated to a maximum of 4 hours.

**PMPR 486. Concentration Seminar. 1 hour.**

Offered in conjunction with the PMPR 485 as a means for students to present and receive feedback on their concentration research projects. Course Information: Prerequisite(s): PMPR 485.

**PMPR 487. Clinical Research Design. 2 hours.**

Students will practice essential research skills by completing several group projects, including analyzing published research, developing a clinical research idea into a research proposal, writing a letter of intent, and presenting their work.

**PMPR 488. Pharmacy Practice Leadership. 2 hours.**

Provides basic concepts in pharmacy practice leadership and serve as a foundation for students interested in a career path in pharmacy management/leadership.