

# PPR - PHARMACY PRACTICE

## **PPR 4115 Social Administrative Sciences and Professional Development I Cr. 3**

Designed to familiarize the student with pharmacy as a profession and to facilitate an understanding of its place in health care today and in the future. Offered Fall.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

## **PPR 4245 Patient Care Lab 1 Cr. 1**

The Patient Care Lab sequence (PCL 1-4) is designed to allow students to begin to develop the direct patient care and pharmacy practice skills they will need to become successful practitioners. Offered Winter.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**Fees:** \$80

## **PPR 4255 Social Administrative Sciences and Professional Development II Cr. 2**

Exploration of health care delivery and payment systems, with an emphasis on pharmacy and pharmacists. Discussion of social constructs, cultural sensitivity, and health belief models as related to pharmacy practice. Offered Winter.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

## **PPR 4315 Pharmacy Jurisprudence I and Professional Responsibility Cr. 2**

Provides a foundational knowledge of pharmacy law with a combined emphasis on professional responsibility. The law component will focus on the application of Michigan state and federal laws to the practice of pharmacy. The professional responsibility component will prepare pharmacy students for their upcoming didactic and experiential learning. Offered Spring/Summer.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

## **PPR 4365 Introductory Pharmacy Practice Experience I Cr. 1**

**Satisfies General Education Requirement:** Writing Intensive Competency  
Beginning learning experiences for patient interviewing and counseling, interaction with healthcare professionals, pharmacy practice in various settings, interprofessional education, healthcare in the underserved population, and community service. Offered Spring/Summer.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

## **PPR 5145 Patient Care Lab II Cr. 1**

The Patient Care Lab sequence (PCL 1-4) is designed to allow students to begin to develop the direct patient care and pharmacy practice skills they will need to become successful practitioners. Offered Fall.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**Fees:** \$80

## **PPR 5155 Social Administrative Sciences and Professional Development III: Practice Management Cr. 2**

Focus on topics that will enable an understanding of how pharmacy services are managed and how to manage personnel and provide leadership. Offered Fall.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

## **PPR 5165 Introductory Pharmacy Practice Experience II Cr. 1**

Beginning learning experiences for patient interviewing and counseling, interaction with healthcare professionals, pharmacy practice in various settings, interprofessional education, healthcare in the underserved population, and community service. Offered Fall.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

## **PPR 5215 Applied Pharmacokinetics and Pharmacogenomics Cr. 2**

Application of knowledge of pharmacokinetics and pharmacogenomics to patient-specific drug dosing. Offered Winter.

**Prerequisite:** PSC 5115

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

## **PPR 5245 Patient Care Lab III Cr. 1**

The Patient Care Lab sequence (PCL 1-4) is designed to allow students to begin to develop the direct patient care and pharmacy practice skills they will need to become successful practitioners. Offered Winter.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**Fees:** \$80

## **PPR 5255 Social Administrative Sciences and Professional Development IV Cr. 2**

Designed to enable understanding of the importance of constructing medication systems and processes around proven best practices to maximize patient safety and to begin developing the ability to conceptualize, implement, and manage these systems in all health care settings. Offered Winter.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

## **PPR 5265 Introductory Pharmacy Practice Experience III Cr. 1**

The introductory pharmacy practice experiences are to provide a beginning learning experiences for patient interviewing and counseling, interaction with healthcare professionals, pharmacy practice in various settings, interprofessional education, healthcare in the underserved population, and community service. Offered Winter.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

## **PPR 5990 Directed Study in Pharmacy Practice Cr. 2**

No credit after election of two credits in any of PSC 5990, PSC 5991, PSC 5992, except by written consent of department chair. Offered Every Term.

**Restriction(s):** Enrollment is limited to Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

## **PPR 6115 Applied Therapeutics in Self-Care Cr. 2**

Application of concepts of patient assessment, therapeutics, patient education, and health care systems to patient self-care. Offered Fall.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

## **PPR 6145 Patient Care Lab IV Cr. 1**

The Patient Care Lab sequence (PCL 1-4) is designed to allow students to begin to develop the direct patient care and pharmacy practice skills they will need to become successful practitioners. Offered Fall.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**Fees:** \$80

## **PPR 6155 Social Administrative Sciences and Professional Development V Cr. 3**

Development of and justification for a pharmacy service, including background, service objectives, service design, implementation plan, and evaluation. Offered Fall.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**PPR 6165 Community-Introductory Pharmacy Practice Experience (C-IPPE) Cr. 2**

Introduction to the organization and provision of community pharmacy services. Offered Fall, Winter.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**PPR 6175 Hospital-Introductory Pharmacy Practice Experience (H-IPPE) Cr. 2**

Introduction to the organization and provision of health-system pharmacy services. Offered Fall, Winter.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**PPR 6235 Social Administrative Sciences and Professional Development VI Cr. 2**

Understanding, developing and evaluating population health and population-based health care programs. Offered Winter.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**PPR 6245 Pharmacy Ethics and Professional Responsibility Cr. 2**

Understanding ethical precepts and applying normative principles to the practice of pharmacy in the context of professional service to the community. Offered Winter.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**PPR 6295 Clinical Capstone Cr. 2**

Utilization of pharmacotherapeutic-related knowledge and skills to evaluate patient cases and practice-related problems in order to assess students' preparedness for advanced pharmacy practice experiences. Offered Winter.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**Fees:** \$99

**PPR 6300 Patient Perspectives of Health, Illness and Culture Cr. 2**

People from various cultures (religious, ethnic, sexual orientation, disability, chronic illness, economic status) discuss in small groups how these cultures influence living with a chronic illness. Students also discuss readings on health culture and keep a journal on their course experience. Offered Spring/Summer.

**Restriction(s):** Enrollment is limited to Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

**Equivalent:** OT 6320

**PPR 6320 Underserved Care: Local and Global Experiences Cr. 2**

Provides the opportunity for hands-on clinical experience in local and international under-served communities. Offered Every Term.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**PPR 6520 Contemporary Issues in Nutrition Support Cr. 2**

Provision of patient care in cooperation with patients, patients' agents, prescribers, and other members of an interprofessional health care team; management and use of resources of the health care system; evaluation of a patient case and design of an optimal nutritional regimen. Offered Spring/Summer.

**Restriction(s):** Enrollment is limited to Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

**PPR 6550 Psychiatric Pharmacy Cr. 2**

Covers core clinical sciences beyond the required pharmacotherapy modules on psychiatric topics. Offered Spring/Summer.

**Prerequisite:** PHA 5155 or PHA 5225

**PPR 6560 Foundations in Global Health Cr. 2**

Provides pharmacy students an introduction to Global Health and enables them to explore their own Global Health interests through local volunteering, class discussions and group projects. Offered Fall.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**PPR 6570 Pharmaceutical Economics Cr. 2**

This course introduces students to cost-effectiveness analysis and related economic tools used to determine the value of pharmaceuticals to society. The tools reviewed are increasingly being used by insurance programs to regulate access to drugs by patients. This course will also cover the institutional landscape of the markets for development and sale of pharmaceuticals, with a focus on the features that have made pharmaceutical prices in the United States among the highest in the world. Policy options that are being considered to reduce these prices have become highly politically salient in recent years, this will be reviewed as well. Offered Fall.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**PPR 6580 Contemporary Issues in Anticoagulation Management Cr. 2**

Advanced therapeutics in area of anticoagulant use. Offered Fall.

**Restriction(s):** Enrollment is limited to Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

**PPR 6590 Principles of Pain Management Cr. 2**

Covers core clinical sciences beyond the required pharmacotherapy modules on pain management topics. And expands on the pathophysiology, pharmacology, and therapeutics covered in the core clinical sciences courses to assist the student pharmacist in developing assessment skills emphasizing inter-professional collaboration. Offered Winter.

**Prerequisite:** PHA 5225

**Restriction(s):** Enrollment is limited to Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

**PPR 6690 Managed Care Pharmacy Elective Cr. 2**

This pharmacy elective course will provide an overview of managed care pharmacy and an understanding of how it impacts the healthcare system. The course will provide the foundation to prepare students for experiential education and career opportunities in a variety of settings, such as: managed care organizations, hospital administration, ambulatory care, pharmaceutical industry, and community pharmacy management. Offered Fall.

**PPR 6720 Clinical Applications of Diabetes Cr. 2**

Advanced elective course on management of diabetes mellitus and its related disorders. Principles of student directed learning, literature discussion and evaluation, interprofessional exposure, small group learning, and hands-on activities. Offered Fall.

**Restriction(s):** Enrollment is limited to Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

**PPR 6740 Advanced Topics in Ambulatory Care Pharmacy Cr. 2**

The overall goal of this course is to increase pharmacy students' knowledge of practice models for ambulatory care pharmacy and investigate career opportunities in ambulatory care pharmacy practice. Offered Winter.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**PPR 6770 Study of Medicinal Plants and Culture in Amazonia Cr. 2**

Ethnobotany of indigenous plants and use of these substances in the health and beliefs of the native people. Students meet with botanists, taxonomists, pharmacists, shamans, and native people. Offered Spring/Summer.

**Restriction(s):** Enrollment is limited to Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

**PPR 6780 Critical Care Pharmacy Elective Cr. 2**

This course is designed to meet the needs of pharmacy students with an interest in further developing their knowledge in common acute diseases encountered in the intensive care unit and the emergency department. The format will consist of a discussion of the disease and drug therapy using patient case presentation(s), class participation, and flipped classroom teaching methods. These sessions will focus on choice and rationale for therapy, dosing and disease state guidelines, as well as monitoring parameters for assessment of efficacy, safety, and toxicity. Offered Winter.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**PPR 6860 Principles of Pediatric Pharmacy Cr. 2-3**

Common pediatric problems and diseases including poisonings, cystic fibrosis, sickle-cell anemia, placental transfer of drugs and teratology. Offered Yearly.

**Restriction(s):** Enrollment is limited to Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

**PPR 7115 Special Topics: Interprofessional Education Cr. 2**

This interprofessional course is for health professional student learners in the areas of advanced practice. The course allows health professional students to learn about, from and with each other, how each discipline contributes to the healthcare team, the importance of effective communication, the role of team collaboration and preparing health care professionals for collaborative practice with a focus on clinical decision making in interdisciplinary teams. Offered Intermittently.

**Restriction(s):** Enrollment is limited to Graduate, Medical or Professional level students.

**Equivalent:** MD4 8115, NUR 7115, PAS 7115, SW 7115

**PPR 7195 Advance Research Scholars: Advance Pharmacy Practice Experience Cr. 4**

Provides capstone research instruction aimed at project completion, writing and peer review processes, and research program advancement. Offered Fall.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy program.

**PPR 7225 Vaccines in Clinical and Public Health Practice Cr. 2**

Explorations of topics related to use of vaccines for infants, children and adults in practice settings that include clinics, pharmacies and public health programs. Offered Yearly.

**Restriction(s):** Enrollment limited to students in the Doctor of Pharmacy or Master in Public Health programs.

**PPR 7410 Advanced Pharmacy Practice Inpatient/Acute Care Cr. 4**

Experimental education designed to provide practical training experience in managing drug therapy of patients in a variety of health-care settings. Offered Every Term.

**Restriction(s):** Enrollment is limited to Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

**Fees:** \$85

**Repeatable for 12 Credits**

**PPR 7420 Advanced Pharmacy Practice Ambulatory Care Cr. 4**

Experimental education designed to provide practical training experience in managing drug therapy of patients in a variety of health-care settings. Offered Every Term.

**Restriction(s):** Enrollment is limited to Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

**Repeatable for 12 Credits**

**PPR 7430 Advanced Pharmacy Practice Patient Care Core Cr. 4**

Experimental education designed to provide practical training experience in managing drug therapy of patients in a variety of health-care settings. Offered Every Term.

**Restriction(s):** Enrollment is limited to Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

**Repeatable for 12 Credits**

**PPR 7530 Advanced Pharmacy Practice Patient Care Elective I Cr. 4**

Experimental education designed to provide practical training experience in managing drug therapy of specialized patients in diversified health-care settings. Offered Every Term.

**Restriction(s):** Enrollment is limited to Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

**Repeatable for 8 Credits**

**PPR 7540 Advanced Pharmacy Practice Non-Patient Care Elective I Cr. 4**

Practical education to develop knowledge in specific areas of pharmacy practice in specialized pharmacy or health-care settings. Offered Every Term.

**Restriction(s):** Enrollment is limited to Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

**Repeatable for 8 Credits**

**PPR 7550 Advanced Pharmacy Practice Hospital Cr. 4**

Practical training experience in hospital pharmacy practice, including pharmacy operations and clinical services. Offered Every Term.

**Restriction(s):** Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

**PPR 7560 Advanced Pharmacy Practice Community Cr. 4**

Practical training experience in management of a community pharmacy, and managing drug therapy of patients in community pharmacy setting. Offered Every Term.

**Restriction(s):** Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

**PPR 7960 Economic Evaluation of Health Care Interventions Cr. 2-3**

Designed for advanced professional students (3rd year pharmacy, medicine, health sciences), students in the Master of Public Health degree program, graduate students and Fellows who would like an introduction to cost-effectiveness analysis. Offered Spring/Summer.

**Restriction(s):** Enrollment is limited to Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.

**PPR 7990 Directed Study in Pharmacy Practice Cr. 1-3**

Minor projects in pharmacy for students whose interests and needs are not adequately met in other scheduled classes or in the doctoral research project. Offered Every Term.

**Restriction(s):** Enrollment is limited to Graduate or Professional level students; enrollment limited to students in the Pharmacy and Health Sciences.