

Pharmacy (PharmD) - PYPD

Courses

PYPD 9000 ORIENTATION (1) WSP. 12.5. This one week course introduces the expectations for a student in the Harrison School of Pharmacy's Practice Ready Curriculum. The course introduces aspects of the role of the pharmacist in healthcare including team member, interprofessional practice, and continual professional development.

PYPD 9010 DRUGS IN PREGNANCY AND LACTATION (1) LEC. 1. The purpose of this course is to introduce pharmacy students to the concepts of teratogenicity, pregnancy and lactation. Non-pharmacological and pharmacological therapy is focused to common pregnancy disease states and lactation issues.

PYPD 9020 FOUNDATIONS OF LEADERSHIP WITHIN THE PHARMACY PROFESSION (1) LEC. 1. This course will allow students to identify leadership skills, traits and values. Leadership tools and resources will be discussed. Students will be exposed to leadership within the practice of pharmacy as well as pharmacy organizations.

PYPD 9030 INTRODUCTION TO PEDIATRICS (1) LEC. 1. The purpose of this course is to introduce students to the basic concepts regarding pediatric development and care including but not limited to normal growth and development, pediatric calculations, community based care, counseling skills, and common disease states.

PYPD 9040 KIDNEYS, DRUGS AND ELIMINATION: WHAT PHARMACISTS NEED TO KNOW (1) LEC. 1. Students will gain in-depth knowledge of how declining kidney function and renal replacement modalities affect biopharmaceutics and develop experience in evaluating drug information related to renal dosing.

PYPD 9050 ONCOLOGY CARE (1) LEC. 1. This course will provide student pharmacists with a working knowledge of cancer as a disease state, as well as the pharmacotherapeutics of chemotherapy, targeted therapy, and biologic therapy. Additionally, students will explore aspects of supportive care, ADR and drug interaction management, chemotherapy administration, and drug monitoring. The structure of the course is highly collaborative and interactive. Students are expected to participate in group activities with a professional and collegial spirit.

PYPD 9060 SELF-CARE AND NONPRESCRIPTION PHARMACOTHERAPY (1) LEC. 1. This course will introduce students to nonprescription pharmacotherapy and other self-care measures used in the outpatient setting to treat minor medical problems. As the most accessible health care professionals, pharmacists are often approached by members of the community to recommend treatments for common ailments. It is important for pharmacists to quickly and accurately assess patients to determine if they are an appropriate self-care candidate or if referral to another health care provider is warranted. This course will expand upon self-care and nonprescription pharmacotherapy topics introduced in the required curriculum, introduce students to self-care issues specific to various special populations, and allow students to learn from one another through group presentations and case discussions.

PYPD 9080 POPULATION HEALTH IPPE (2) CLN. 2. SU. This course is a longitudinal introductory pharmacy practice experience (IPPE) that students will complete during the P2 year. During this course, practical concepts related to pharmaceutical care and the pharmacists' patient care process are re-enforced through the provision of basic care to community based patients. Students will earn 10 IPPE hours from the successful completion of the course. Earning of IPPE hours will be done through multiple formats including traditional in-home patient encounters, patient care simulations, as well as other practical experiences in collaboration with community partners.

PYPD 9160 COMMUNITY PHARMACY IPPE (2) LEC. 2. SU. Students will be exposed to a community pharmacy setting in which they will gain experience in the drug distribution process, patient counseling, and interprofessional collaboration. Students will have opportunities to apply concepts and clinical knowledge learned during their P1 year. Admission into the Doctor of Pharmacy Program or Permission of the Associate Dean for Academic Programs.

PYPD 9170 HEALTH SYSTEM PHARMACY IPPE (2) CLN. SU. Students will have opportunities to apply concepts and clinical knowledge previously learned to patient care in the setting of a functioning institutional pharmacy. They will participate in patient care through the drug distribution process, prospective drug review, drug monitoring, and interprofessional interactions. Admission into the Doctor of Pharmacy Program or Permission of the Associate Dean for Academic Programs.

PYPD 9180 CLINICAL PHARMACY IPPE (1) LEC. 1. SU. This is an introductory pharmacy practice experience (IPPE) course focused on providing pharmaceutical care to patients in a primary/ambulatory care or acute care setting. Admission into the Doctor of Pharmacy Program or Permission of the Associate Dean for Academic Programs.

PYPD 9190 HEALTH AND WELLNESS INTRODUCTORY PHARMACY PRACTICE EXPERIENCE (1) CLN. 1. SU. This is an Introductory Pharmacy Practice Experience (IPPE) that students will complete during a one-week block in their P2 year. Students will receive 40 IPPE hours upon completing the course. Students will build upon their initial exposure to the community pharmacy setting that occurred during their three-week Community Pharmacy IPPE in the Summer after their P1 year and focused on the medication distribution process. The focus of the Health and Wellness rotation experience is providing clinical services to patients within in the community pharmacy setting. Students have opportunities to apply concepts and clinical knowledge learned during their P1 and P2 years to the community pharmacy setting. Students will be engaged in determining patients' immunization status and making appropriate recommendations. Students will educate patients on immunizations and administer immunizations under the supervision of their licensed pharmacist preceptor. Another area of emphasis during this experience will be screening patients for hypertension and diabetes by performing blood pressure and blood glucose measurements. Students will interpret and explain results of health screenings to patients and educate them on the importance of self-monitoring. Admission into the Doctor of Pharmacy Program or approval of the Associate Dean for Academic Affairs.

PYPD 9200 INTEGRATED LEARNING EXPERIENCE I (6) LEC. 6. Students will acquire foundational knowledge of Hypertension, Diabetes Mellitus, Obesity Management, Diarrhea and Constipation, Fluid and Electrolytes, and Hypersensitivity. These disease states will provide context for students to develop knowledge and skills of various aspects of the Patient Care Process.

PYPD 9210 INTEGRATED LEARNING EXPERIENCE II (6) LEC. 6. Admission into the Doctor of Pharmacy Program or Permission of the Associate Dean for Academic and Student Affairs. Students will acquire foundational knowledge of Lipids, Depression, Alzheimer's/ Dementia, Hypothyroid, Asthma, Chronic obstructive pulmonary disease (COPD), and Smoking Cessation. These disease states will provide context for students to develop knowledge and skills of various aspects of the PPCP.

PYPD 9220 INTEGRATED LEARNING EXPERIENCE III (6) LEC. 6. Pr. (PYPD 9200 or PYPD 9206) and (PYPD 9210 or PYPD 9216). Admission into the Doctor of Pharmacy Program or Permission of the Associate Dean for Academic and Student Affairs. This six-week course integrates biomedical sciences, pharmaceutical sciences, social/behavioral/administrative sciences, and clinical sciences. Students will acquire foundational knowledge related to Pain, Osteoarthritis (OA), Seizures, Gastroesophageal reflux disease (GERD), Stable ischemic heart disease (SIHD), Stroke, Thromboembolism, and Heart Failure.

PYPD 9230 INTEGRATED LEARNING EXPERIENCE IV (6) LEC. 6. Pr. (PYPD 9200 or PYPD 9206) and (PYPD 9210 or PYPD 9216). This six-week course will focus on knowledge and skills related to various aspects of the Pharmacists' Patient Care Process such as collecting information, conducting assessments, developing and implementing a plan including patient counseling, and documenting patient information. The course includes an introduction to pharmaceutical compounding and foundational knowledge related to over-the-counter treatment of cough, cold, and various dermatologic conditions.

PYPD 9240 INTEGRATED LEARNING EXPERIENCE V (6) LEC. 6. Pr. (PYPD 9220 or PYPD 9226) and (PYPD 9230 or PYPD 9236). This six-week course integrates biomedical sciences, pharmaceutical sciences, social/behavioral/administrative sciences, and clinical sciences to provide students with the knowledge, skills, behaviors, and attitudes necessary for developing into a practice ready pharmacist. During this ILE, students will acquire foundational knowledge related to generalized anxiety disorder; bipolar disorder/ schizophrenia; dementia; Parkinson's disease, attention-deficit/hyperactivity disorder (ADHD); sleep disorders; hepatitis and cirrhosis; pancreatitis; and hyperthyroidism.

PYPD 9250 INTEGRATED LEARNING EXPERIENCE VI (6) LEC. 6. Pr. (PYPD 9220 or PYPD 9226) and (PYPD 9230 or PYPD 9236). This six-week course integrates biomedical sciences, pharmaceutical sciences, social/behavioral/administrative sciences, and clinical sciences to provide students with the knowledge, skills, behaviors, and attitudes necessary for developing into a practice ready pharmacist. During this ILE, students will acquire foundational knowledge related to diabetic ketoacidosis (DKA)/ hyperosmolar hyperglycemic state (HHS); acid-base disturbances; nausea and vomiting; dehydration; chronic kidney disease (CKD) and secondary complications; acute kidney injury (AKI); nutrients/nutrition; and iron deficiency.

PYPD 9260 INTEGRATED LEARNING EXPERIENCE VII (6) LEC. 6. Pr. (PYPD 9240 or PYPD 9246) and (PYPD 9250 or PYPD 9256). Students will acquire foundational knowledge related to HIV/AIDS, fungal and opportunistic infections, upper respiratory tract infections, allergic rhinitis, viral infections, meningitis, and sepsis. Students will increase the depth of disease states and medications encountered in ILE 4 including: skin and soft-tissue infections, pneumonia, urinary tract infections, sexually transmitted diseases, cough and cold, and dermatologic conditions. The disease states will be integrated to allow student understanding of the relationship between the disease states and medications used to treat these disorders. These disease states will provide context for students to apply knowledge and skills of various aspects of the Pharmacists' Patient Care Process such as collecting information, conducting assessments, developing and implementing a plan including patient counseling, and documenting patient care plans in the SOAP format and/or in the electronic health record (EHR). Students will explore the relationship between medicinal chemistry and the physical and chemical properties which affect ADME, as well as how these relate to differences within and between drugs and drug classes. ILE 7 will reinforce previous competencies introduced in ILEs 1-6, allowing students to apply what was learned in a different context (varying disease states and/or more complex situations).

PYPD 9270 INTEGRATED LEARNING EXPERIENCE VIII (6) LEC. 6. Pr. (PYPD 9240 or PYPD 9246) and (PYPD 9250 or PYPD 9256). During this learning experience, students will acquire foundational knowledge related to cardiology, rheumatology, men's and women's health, and neurology. Students will increase the depth of disease states and medications encountered earlier in the program including: stable ischemic heart disease, venous thromboembolism, stroke, heart failure, osteoarthritis, pain, and epilepsy. Admission into the Doctor of Pharmacy Program or Permission of the Associate Dean for Academic and Student Affairs

PYPD 9280 INTEGRATED LEARNING EXPERIENCE IX (6) LEC. 6. Pr. (PYPD 9260 or PYPD 9266) and (PYPD 9270 or PYPD 9276). In this course, students will acquire and/or reinforce knowledge related to inflammatory bowel disease, fluids and electrolytes, nutrition support services, hematology, oncology, sepsis, endocarditis, fungal infections, sedation, delirium of critical illness, glomerulonephritis, diabetic ketoacidosis, acid-base disturbances, and type 1 diabetes. This course reinforces competencies related to using subjective and objective information to determine patient-specific healthcare needs and the formulation of an assessment. The content will reinforce organizing and prioritizing information gathered, assessing the appropriateness of therapy based on efficacy and safety, determining the relevance of medication allergies and interactions, and preventing hospital admissions. The development and implementation of an evidence-based, patient-centered care plan that incorporates the assessment of patient-specific factors and medications will be emphasized throughout. Professional communication, focusing on communicating with patients or healthcare providers when there is an educational need, will be reinforced. Admission into the Doctor of Pharmacy Program or Permission of the Associate Dean for Academic and Student Affairs.

PYPD 9290 INTEGRATED LEARNING EXPERIENCE X (6) LEC. 6. Pr. (PYPD 9260 or PYPD 9266) and (PYPD 9270 or PYPD 9276). This course reinforces competencies related to collecting and using subjective and objective information to determine patient specific healthcare needs and the formulation of an assessment and plan. The content will reinforce organizing and prioritizing information gathered, assessing appropriateness of therapy based on efficacy and safety, determining the relevance of medication allergies and interactions, preventing hospital admissions, and knowing when self-treatment is appropriate versus conditions that need a referral. The development and implementation of an evidence-based, patient-centered care plan that incorporates the assessment of patient-specific factors and medications will be emphasized throughout. Professional communication, focusing on communicating with patients or healthcare providers will be reinforced with emphasis on cultural awareness and barriers in education.

PYPD 9300 INTEGRATED LEARNING EXPERIENCE XI (6) LEC. 6. Pr. (PYPD 9280 or PYPD 9286) and (PYPD 9290 or PYPD 9296). This course reinforces competencies related to collecting and using subjective and objective information to determine patient specific healthcare needs and the formulation of an assessment and plan. The content will reinforce organizing and prioritizing information gathered, conducting medication reconciliation, assessing appropriateness of therapy based on efficacy and safety, determining the relevance of medication allergies, and knowing when self-treatment is appropriate versus conditions that need a referral. The development and implementation of an evidence-based, patient-centered care plan that incorporates the assessment of patient-specific factors and medications will be emphasized throughout. The legal requirements for medication distribution will be emphasized for processing medication orders as well as medication safety reporting and documentation.

PYPD 9310 INTEGRATED LEARNING EXPERIENCE XII (6) LEC. 6. Pr. (PYPD 9280 or PYPD 9286) and (PYPD 9290 or PYPD 9296). This course reinforces competencies related to collecting and using subjective and objective information to determine patient specific healthcare needs and the formulation of an assessment and plan. The content will reinforce the interpretation, verification, processing, and labeling of medications orders in different healthcare settings with increasing complexity, complying with all federal, state, and local laws; collecting, reviewing, and assessing subjective and objective information; identifying and correcting drug-related problems; utilizing appropriate medical and medication informational resources and applying the knowledge of study design and literature analysis; performing calculations; communicating with and educating patients, caregivers and stakeholders; and identifying resources for patient's healthcare needs. The students will further develop an understanding of the relationship between patient-specific factors, including pharmacogenomics, on drug selection and monitoring. Drug interactions will be explored more in-depth as students understand how to predict and resolve drug-drug and drug-disease interactions based on drug-specific and patient-specific factors. Cases will emphasize various patient populations, such as adolescent, pregnancy, and older adult. Immunization assessment and plan will be incorporated in each patient case. Admission into the Doctor of Pharmacy Program or Permission of the Associate Dean for Academic Programs.

PYPD 9320 LONGITUDINAL EXPERIENCE I (3) LEC. 3. This semester-long course focuses on navigating the health care system. Learners will explore key issues related to patient education/public health, communication, assessment, advocacy, and management.

PYPD 9330 LONGITUDINAL EXPERIENCE II (3) LEC. 3. Pr. (PYPD 9320 or PYPD 9326). Admission into the Doctor of Pharmacy Program or Permission of the Associate Dean for Academic and Student Affairs. This semester long course integrates multiple disciplines, including social/behavioral/administrative sciences and clinical sciences to introduce students to issues related to public health, population health, and individual health and wellness.

PYPD 9340 LONGITUDINAL EXPERIENCE III (3) LEC. 2.5. Pr. (PYPD 9330 or PYPD 9336). This longitudinal experience will introduce students to topics related to strategic marketing strategies for pharmacists' services and will expose students to different types of innovative pharmacy services in different practice settings. The overall goal of this longitudinal experience is to teach students the pertinent skills and decision-making tools needed to establish a new non-dispensing pharmacy service and justify its existence through both financial and intangible values, as well as to design systems and processes that will foster effective and appropriate communication between the pharmacist and patients, other healthcare providers, and stakeholders.

PYPD 9350 LONGITUDINAL EXPERIENCE IV (3) LEC. 2.5. Pr. PYPD 9340 or PYPD 9346. This Longitudinal experience will build on prior courses with a focus on incorporating and improving a given service within a pharmacy, within the context of services and products. Thus, the Longitudinal will have a Pharmacy Operations Management and Continuous Quality Improvement (CQI) emphasis. Students will be introduced to the CQI process and principles to enable them to 'improve' existing operations and clinical services. The use of a variety of examples will provide opportunities to apply principles to support recommendations regarding pharmacy operations. This will involve data collection and creation of an improvement plan. To complete the exploration of operations and CQI topics, financial considerations will be incorporated, focusing on the entire pharmacy program, including the role of payers. Admission into the Doctor of Pharmacy Program or Permission of the Associate Dean for Academic and Student Affairs

PYPD 9360 LONGITUDINAL EXPERIENCE V (3) LEC. 2.5. Pr. PYPD 9350 or PYPD 9356. This course will focus on the planning and sustainability of pharmacy services through billing, contract, and inventory management along with personnel and formulary management. The emphasis on formulary management will be to assist the Pharmacy and Therapeutics (P&T) committee's decision making regarding which drugs to put on the formulary. The medication use process will also be discussed and applied. The Longitudinal will also prepare students to meet future needs of the pharmacy profession by engaging students in thinking about non-traditional services and ideas.

PYPD 9370 LONGITUDINAL EXPERIENCE VI (3) LEC. 2.5. Pr. PYPD 9360 or PYPD 9366. This semester-long course focuses on providing learners with learning opportunities related to their personal and professional goals. Learners will explore key issues related to drug information / evidence-based medicine, leadership, professionalism, and professional development.

PYPD 9380 GERIATRIC CARE I (1) LEC. 1. This study of geriatric health focuses on geriatric patient assessment and interprofessional care of the older adult patient. Students will be required to evaluate how pharmacists can impact these sequelae through interprofessional care teams while optimizing patient's health-related quality of life. This course focuses on those environmental, psychological, and physiological characteristics that are unique to, or more prevalent among, geriatric patients. Admission into the Doctor of Pharmacy program or permission of the Associate Dean for Academic Programs.

PYPD 9390 GERIATRIC CARE II (1) LEC. 1. This study of geriatric health focuses on geriatric patient assessment and management of common pharmacotherapy issues in the older adult patient. Students will be required to evaluate how pharmacists can impact these sequelae through pharmacotherapy management while optimizing patient's health-related quality of life. This course focuses on those pharmacodynamic and pharmacokinetic characteristics that are unique to, or more prevalent among, geriatric patients. Admission into the Doctor of Pharmacy program or permission of the Associate Dean for Academic Programs.

PYPD 9400 WORKSHOP I (1) LEC. 1. In this workshop, will explore the use of drug information resources and related to the use of drug information resources and population levels.

PYPD 9410 WORKSHOP II (1) LEC. 12.5. Pr. PYPD 9400 or PYPD 9406. Admission into the Doctor of Pharmacy Program or Permission of the Associate Dean for Academic and Student Affairs. This is a focused, intensive, one week workshop where students will acquire theoretical and practical knowledge related to the Pharmacists' Patient Care Process.

PYPD 9420 WORKSHOP III (1) LEC. 12.5. Pr. PYPD 9410 or PYPD 9416. This is a focused, intensive, one-week workshop where students will acquire theoretical and practical knowledge related to a contemporary issue in the field of pharmacy. In this workshop, students will explore the provision of pharmacy-based immunization services utilizing the APhA Pharmacy-Based Immunization Delivery course materials and additional supplemental instructional materials. At the end of this workshop students will have the knowledge and skills related to the development and provision of pharmacy-based immunization services, will know how to serve as a vaccine advocate, and will receive a certificate of completion for the APhA Pharmacy-Based Immunization Delivery course.

PYPD 9430 WORKSHOP IV (1) LEC. 1. Pr. PYPD 9420 or PYPD 9426. This workshop builds upon concepts taught across the first two years in the ILE's and will utilize information the students have developed from a series of self paced videos designed to teach the basic science concepts of pharmacokinetics. The students will also be expected to incorporate knowledge related to previously covered diseases and medications. The focus of the workshop will be to show the students the application of pharmacokinetic knowledge related to A, D, M, and E in multiple settings (retail, hospital, long term care) of pharmacy practice in a case based setting. Admission into the Doctor of Pharmacy Program or Permission of the Associate Dean for Academic and Student Affairs.

PYPD 9440 WORKSHOP V (1) LEC. 12.5. Pr. PYPD 9430 or PYPD 9436. This is a focused, intensive, one week workshop where students will acquire theoretical and practical knowledge related to pharmacoeconomics and its application to the economic evaluation of pharmaceuticals and the overall healthcare system.

PYPD 9450 WORKSHOP VI (1) DSL/LEC. 12.5. Pr. PYPD 9440 or PYPD 9446. In this focused, intensive, one week workshop students will review and update their patient care skills, determine their own long term career goals, and develop a plan for achieving those goals.

PYPD 9460 FINANCES FOR THE PHARMACIST (1) LEC. 1. Pharmacy students need specific advice to prepare for life after pharmacy school in relation to financial planning including managing debt, credit, budgeting, and banking. After graduation from pharmacy school, the majority of students have high amounts of debt and enter the workforce with a higher income that they are likely unaware of how to manage. Equipping students with skills and knowledge to manage their finances will help them be more productive and avoid pitfalls and anxiety related to finances. Admission into the Doctor of Pharmacy Program or permission of the Associate Dean for Academic Programs.

PYPD 9470 PRINCIPLES OF FUNCTIONAL MEDICINE – A PATIENT CENTERED APPROACH (1) LEC. 1. Students will be introduced to the concept of Functional Medicine and the pharmacist's role in chronic disease state management using Functional Medicine principles. Students will also examine the impact of holistic healing as a path to overall health and wellness through investigation of their own health and wellness. Students will utilize evidence-based medicine as a framework for these principles and will apply the information learned in this course to patient care. Admission into the Doctor of Pharmacy Program or permission of the Associate Dean for Academic Programs.

PYPD 9480 ADVANCED PHARMACOKINETICS I (1) LEC. 1. SU. Pr. PYPD 9430 or PYPD 9436. The purpose of this course is to build upon basic pharmacokinetic concepts introduced earlier in the curriculum to develop the skills and expertise necessary to create an individualized plan for dosing and monitoring vancomycin and aminoglycoside antibiotics.

PYPD 9490 INTRODUCTION TO PHARMACOGENOMICS (1) LEC. 1. Pr. (PYPD 9230). This College of Pharmacy elective course will introduce pharmacy students to genetic variation and how this impacts efficacy and adverse effects associated with pharmacotherapy within a variety of disease states.

PYPD 9500 AMBULATORY CARE ANTICOAGULATION (1) LEC. 1. Currently enrolled in the Doctor of Pharmacy program or permission of the Associate Dean for Academic and Student Affairs. This course will provide students with a working knowledge of pharmacotherapeutic issues related to anticoagulation therapy in the out-patient setting including an introduction to the various roles of pharmacists in the management of anticoagulation therapy.

PYPD 9510 EXPLORING DIABETES CARE FROM THE PATIENT PERSPECTIVE (1) LEC. 2.1. Pr. (PYPD 9200 or PYPD 9206 and PYPD 9210 or PYPD 9216) and (PYPD 9220 or PYPD 9226 and PYPD 9230 or PYPD 9236). or permission of the Associate Dean for Academic and Student Affairs. Currently enrolled in the Doctor of Pharmacy program or permission of the Associate Dean for Academic and Student Affairs. Students will learn from pharmacists who specialize in diabetes to discuss pivotal literature sources and their impact on patient care. Students will gain appreciation of Standards of Care through active participation in a weekly deconstructed "diabetes experience" documented with reflective individual writings and/or group video recordings.

PYPD 9520 DRUGS OF ABUSE AND MISUSE (1) LEC. 1. Currently enrolled in the Doctor of Pharmacy program or permission of the Associate Dean for Academic and Student Affairs. This course will provide students with a working knowledge of the current trends in drugs of abuse, the public health implications from abuse of these drugs, and the role of different community stakeholders in the fight against this epidemic.

PYPD 9530 RESEARCH METHODS IN HEALTH SERVICES I (1) LEC. 12.5. Currently enrolled in the Doctor of Pharmacy program or permission of the Associate Dean for Academic and Student Affairs. The course is designed to provide a comprehensive introduction to the primary research methods used in clinical and health services research. It will focus on an introduction to various research designs including experimental and non-experimental, as well as quantitative and qualitative research methods. This course is ideal for student pharmacists and graduate students who want to acquire research knowledge and skills enabling them to participate in clinical and translational research teams and to evaluate programs/services at their clinical/pharmacy sites. It will serve as a research resource for their future research projects.

PYPD 9540 RESEARCH METHODS IN HEALTH SERVICES II (1) LEC. 12.5. PYPD 9530 or enrolled in PYPD 9530 during the same semester. Currently enrolled in the Doctor of Pharmacy program or permission of the Associate Dean for Academic and Student Affairs. This course is ideal for student pharmacists and graduate students who want to acquire research knowledge and skills enabling them to participate in clinical and translational research teams and to evaluate programs/services at their clinical/pharmacy sites. It will serve as a research resource for their future research projects.

PYPD 9550 ACUTE CARE PHARMACOTHERAPY I (1) LEC. 1. Currently enrolled in the Doctor of Pharmacy program or permission of the Associate Dean for Academic and Student Affairs. This course is designed to orient the pharmacy student to the acute care environment and familiarize the student with patient disease states and pharmacotherapy issues associated with the acutely ill patient in an inpatient setting.

PYPD 9560 ACUTE CARE PHARMACOTHERAPY II (1) LEC. 2. This course is a continuation of PYPD 9550. The course will cover more disease states and pharmacotherapy issues related to patients in an inpatient setting. Additionally, there will be more focus on special populations along with dosing medications in organ dysfunction.

PYPD 9570 HISTORY OF PHARMACY (1) LEC. 1. Currently enrolled in the Doctor of Pharmacy program or permission of the Associate Dean for Academic and Student Affairs. History influences nearly everything we do and that is certainly the case for the profession of pharmacy. Every course taught can provide historical contexts for the information and application. A general course in pharmacy history can give a firm foundation for any student and graduate to fully embrace their chosen profession, understand its beginnings and development, and be a competent practitioner. The intent of this course is to provide that background so that the student has an appreciation for what has come before and an understanding of the many symbols and advances of the profession that surround any pharmacy practitioner. This ranges from the Rx to the patient counseling booth to the pharmacokinetic consult.

PYPD 9580 PALLIATIVE CARE AND END OF LIFE (1) LEC. 1. Students will be introduced to the pharmacist's role in hospice/palliative care and symptoms experienced by the dying with an emphasis on interdisciplinary care. Students will also examine the impact of multicultural aspects of providing care in palliative and hospice care.

PYPD 9590 ADVANCED TRAINING IN DIABETES CARE FROM THE PROVIDER'S PERSPECTIVE (1) LEC. 1. Pr. (PYPD 9200 or PYPD 9206) and (PYPD 9210 or PYPD 9216) and (PYPD 9220 or PYPD 9226) and (PYPD 9230 or PYPD 9236) and (PYPD 9240 or PYPD 9246) and (PYPD 9250 or PYPD 9256) and (PYPD 9260 or PYPD 9266) and (PYPD 9270 or PYPD 9276). Course will emphasize completion of necessary steps for achieving The Pharmacist and Patient-Centered Diabetes Care certificate by the American Pharmacists Association, which will include but is not limited to: small group exercises, class discussions, simulated patient counseling (medication, lifestyle and devices). Permission of the Associate Dean for Academic Programs may be needed.

PYPD 9600 ADVANCED PHARMACY PRACTICE EXPERIENCE (5) PRA. Pr. (PYPD 9310 or PYPD 9316). Advanced pharmacy practice experiences in Acute Care/General Medicine, Ambulatory Care/Primary Care, Community Pharmacy, Drug Information, and various other pharmacy practice settings. Course may be repeated for a maximum of 45 credit hours.

PYPD 9610 COMMUNITY PHARMACEUTICAL CARE (5) PRA. 62.5. Advanced Practice Experience in a community pharmacy practice setting that provides pharmaceutical care services such as disease management and other advanced patient care activities. Fall, Spring, Summer.

PYPD 9620 MEDICINE I (5) PRA. 62.5. Advanced practice experience in providing Inpatient Pharmaceutical Care. Fall, Spring, Summer.

PYPD 9630 MEDICINE II - SELECTIVE (5) PRA. 62.5. Advanced practice experience in providing Inpatient Pharmaceutical Care. Additional experience beyond PYDI 9620. Fall, Spring, Summer.

PYPD 9640 PRIMARY/AMBULATORY CARE I (5) PRA. 62.5. Advanced practice experience in providing care to patients as they initially access the health care system. Fall, Spring, Summer.

PYPD 9650 PRIMARY/AMBULATORY CARE II (5) IND/PR1. 62.5. This culminating course will require a comprehensive review and application of knowledge gained throughout the first 3 years of the PharmD Curriculum. Through case, problem and project based learning, learners will apply didactic and clinical knowledge/skills in a self-directed manner.

PYPD 9660 HEALTH SYSTEM PRACTICE (5) PRA. 62.5. Advanced practice experience in a health system setting that prepares the student to adapt and function within systems of integrated pharmaceutical care services. Fall, Spring, Summer.

PYPD 9670 PRACTICE ELECTIVE I (5) PRA. 62.5. Elective experience in an advanced practice experience setting in which the student establishes personal learning goals and responsibilities. Fall, Spring, Summer.

PYPD 9680 PRACTICE ELECTIVE II (5) PRA. 62.5. Elective experience in an advanced practice experience setting in which the student establishes personal learning goals and responsibilities. Fall, Spring, Summer.

PYPD 9690 DRUG INFORMATION-SELECTIVE (5) PRA. 62.5. Status of a 4th Year Doctor of Pharmacy Student (P4) or Permission of the Associate Dean for Academic and Student Affairs. Advanced practice experience in providing drug information services to health care providers. Fall, Spring, Summer.

PYPD 9700 SUMMATIVE EXPERIENCE I (3) IND. 37.5. SU. The P4 Summative Experience I is an independent study course focusing on the North American Pharmacist Licensure Examination (NAPLEX) preparation utilizing the RxPrep package. Students will work longitudinally to complete study modules based on an assigned schedule with each module culminating in a cumulative assessment. Course requirements are to be completed outside of Advanced Pharmacy Practice (APPE) rotation requirements.

PYPD 9710 COMMUNITY PHARMACY PRACTICE I (1) LEC. 12.5. Currently enrolled in the Doctor of Pharmacy program or permission of the Associate Dean for Academic and Student Affairs. This course will focus on legal and business aspects of community pharmacy practice. Students will be paired with a mentor for this course who will provide real world examples of these aspects of community pharmacy.

PYPD 9720 COMMUNITY PHARMACY PRACTICE II (1) LEC. 1. This course will focus on the development and implementation of clinical services within the community pharmacy setting. Students will receive training on concept development through implementation of medication therapy management services in this setting.

PYPD 9730 INFECTIOUS DISEASES I (1) LEC. 1. This course will provide the student with an in depth exposure to the treatment of bacterial infectious diseases, with a particular focus on antimicrobial stewardship and the treatment of multidrug-resistant organisms.

PYPD 9740 INFECTIOUS DISEASES II (1) LEC. 1. This course will provide the student with an in depth exposure to the treatment of different viral, fungal, and bacterial infectious diseases not covered in depth in other portions of the curriculum. Admission into the Doctor of Pharmacy program or permission of the Associate Dean for Academic Programs

PYPD 9750 ADVANCED MOTIVATIONAL INTERVIEWING (1) LEC. 1. Motivational interviewing (MI) is an evidence-based method for facilitating voluntary health behavior change with patients and with providers. Target behaviors for patients engaged in comprehensive disease management may include outcome enhancing behaviors like medication taking, healthy eating, monitoring, physical activity, sleep management, smoking cessation, among others. This course will 1) explore the conceptual basis for why motivational interviewing is effective in facilitating health behavior change, and 2) provide basic and advanced training and practice for using motivational interviewing to help patients with self-management of their health conditions. This course is intended and designed to support and build student self-efficacy for using MI in patient encounters within a health/disease management context. MI principles and micro skills will be applied by the instructor in the process of helping facilitate student learning. It is hoped that the student will come away from the course encouraged, not discouraged, about using MI for improved patient outcomes in future practice/research.

PYPD 9760 POST-GRADUATE TRAINING PREPARATION (1) LEC. 1. This course will review post-graduate education opportunities for pharmacists with a focus on pharmacy residency training. Students will learn about post-graduate opportunities within pharmacy and develop skills and tools necessary in securing a position after graduation.

PYPD 9770 ACUTE CARE ANTITHROMBOTIC (1) LEC. 1. This course will provide students with a working knowledge of pharmacotherapeutic issues related to antithrombotic therapy in the inpatient setting including an introduction to roles and responsibilities of pharmacists in the management of antithrombotic therapy in this setting. Admission into the Doctor of Pharmacy program or permission of the Associate Dean for Academic Programs.

PYPD 9780 TOXICOLOGY AND POISONS (1) LEC. 1. Toxicology is the science of poisons and their antidotes. Almost any substance has the ability to cause noxious effects on living beings. The Toxicology and Poisons course is designed to introduce the Doctor of Pharmacy student to the role of the pharmacist in the management of poisonous substances and intentional and unintentional drug overdoses. Admission into the Doctor of Pharmacy program or permission of the Associate Dean for Academic Program.

PYPD 9790 THERAPEUTIC USE OF OPIOIDS (1) LEC. 1. Opioids as a class of medications are a high risk class of medications. As such, it is important that pharmacists learn to be systematic in their approach to dosing these medications and to recognize common mistakes made in their dosing. This course will provide an in-depth approach to dosing these medications. Each week will focus on a different area of dosing using patient cases to allow students to practice calculations and making recommendations. Status as a 3rd year student in the Doctor of Pharmacy program or permission of the Associate Dean of Academic Programs.

PYPD 9800 SUMMATIVE EXPERIENCE II (3) IND. 3. SU. Pr. PYPD 9700. The P4 Summative Experience II contains both an independent study component focusing on North American Pharmacist Licensure Examination (NAPLEX) board exam and Multistate Pharmacy Jurisprudence Examination (MPJE) preparation utilizing the RxPrep package and supplemental materials as well as the completion of various assignments during the course of Advanced Pharmacy Practice Experiences (APPE) rotations. Course requirements are adjunctive to APPE rotation requirements. Status of a 4th Year Doctor of Pharmacy Student (P4) or permission of the Associate Dean for Academic Programs.

PYPD 9810 ADVANCED PEDIATRICS (1) LEC. 1. The purpose of this course is to expose students to advanced pediatric topics regarding disease states, therapeutics (acute and chronic therapy) and pharmacogenomics. Concepts from the Introduction to Pediatrics course will be incorporated. Admission into the Doctor of Pharmacy program or permission of the Associate Dean for Academic Programs.

PYPD 9820 INTERPROFESSIONAL PEDIATRICS (1) LEC. 1. Course will expose students to advanced pediatric topics regarding disease states, pharmacokinetics, and therapeutics. Admission into the Doctor of Pharmacy program or permission of the Associate Dean for Academic Programs.

PYPD 9830 ACUTE CARE SELECTIVE II (5) LEC. 5. Advanced practice experience in providing pharmaceutical care to patients in an additional acute care setting. General medicine (acute care) experiences provide comprehensive, evidence-based, individualized, patient-centered care to adult inpatients typically located on a general medicine floor. Pharmacists are expected to be accountable for the patient's drug therapy outcomes and practice as an integrated member of the inter-professional health care team. Typical patients present with the following medical problems: cardiac, pulmonary, renal, hepatic, neurologic, gastrointestinal, endocrine and infectious diseases. The experience incorporates all elements of care from medication reconciliation, medication therapy recommendations and monitoring, discharge counseling, and transitions of care. Doctor or Pharmacy program or permission of the Associate Dean for Academic Programs

PYPD 9840 CLINICAL ISSUES IN UNDERSERVED POPULATIONS (1) LEC. 1. This course focuses on addressing barriers patients vulnerable to health disparities face in our healthcare system. Students will expand knowledge of social determinants of health, available medication resources, and clinical strategies to reduce health disparities in the primary care setting. Enrollment in the Doctor of Pharmacy Program or approval of the Associate Dean for Academic Programs.

PYPD 9850 PRIMARY CARE SELECTIVE II (5) LEC. 5. Advanced practice experience in providing pharmaceutical care to patients as they initially access the health care system. This is an additional opportunity for students to train in a primary care care setting. Primary care experiences provide evidence-based, patient-centered collaborative care in the outpatient setting to meet the medication management needs of patients in the treatment of chronic disease. These pharmacists promote health and wellness, disease prevention and education, and medication management of chronic illnesses such as diabetes, hypertension, coronary artery disease / dyslipidemia, asthma / chronic obstructive pulmonary disease, and heart failure. Other chronic diseases encountered by the ambulatory care pharmacist may include chronic kidney disease, chronic infectious diseases, and other chronic diseases responsive to infusion therapy that do not require hospitalization. Pharmacist delivered ambulatory care occurs in institutional health system-based clinics, community-based clinics, government-funded clinics, and managed care organizations as well as the community pharmacy setting where comparable care is provided. 4th year Doctor of Pharmacy Students or the permission of the Associate Dean for Academic Programs

PYPD 9860 METABOLIC SYNDROME 1 (1) LEC. 1. Metabolic Syndrome 1 will focus on the assessment and treatment (nonpharmacologic and pharmacologic) of disease states related to metabolic syndrome, including prevention of these comorbidities. Special attention will be given to patient considerations in the management of these diseases. Enrollment in the Doctor of Pharmacy Program or Approval of the Associate Dean for Academic Programs.

PYPD 9870 METABOLIC SYNDROME 2 (1) LEC. 1. Metabolic Syndrome 2 will focus on the assessment and treatment (nonpharmacologic and pharmacologic) of disease states related to metabolic syndrome with special attention given to its management of unique patient populations. In addition, considerations for communication with other healthcare providers will be addressed. Enrollment in the Doctor of Pharmacy Program or approval of the Associate Dean for Academic Programs.

PYPD 9880 CARDIOLOGY (1) LEC. 1. Pr. PYPD 9230. This course will introduce and expand upon core cardiovascular disease states essential for the practice ready pharmacist. HCOP students will utilize evidence-based medicine to guide all pharmacotherapy discussions and gain experience in applying these principles to make patient care decisions.

PYPD 9890 CONSULTANT PHARMACY: AN EXPANDING AREA OF PRACTICE (1) LEC. 1. Pr. PYPD 9230. Consultant pharmacy is an expanding area of practice. Consultant pharmacists collaborate with the healthcare team to provide expert clinical guidance to promote safe and effective drug therapy for older adult patients and to ensure compliance with state and federal regulations. This course will introduce HCOP students to the field of consultant pharmacy.

PYPD 9900 THE NUTRITION KITCHEN, AN INTERDISCIPLINARY CULINARY MEDICINE ELECTIVE (PHARMACY) (1) LEC. 1. SU. Pr. (PYPD 9230). The Nutrition Kitchen is an interdisciplinary culinary medicine elective to prepare future healthcare professionals utilizing a food-forward approach in the care of patients with nutrition-related chronic diseases. This specific course is for Doctor of Pharmacy students in the Harrison College of Pharmacy.

PYPD 9910 ANTIMICROBIAL STEWARDSHIP (1) LEC. 1. Pr. PYPD 9230. This HCOP elective course will explore the principles of antimicrobial stewardship and avenues for pharmacists to engage in antimicrobial stewardship efforts in a variety of patient care settings. Through simulated activities, pharmacy students will gain experience learning, recommending, and communicating antimicrobial stewardship interventions.

PYPD 9920 PHARMACY-BASED POINT-OF-CARE TEST AND TREAT (1) LEC. 1. SU. Pr. PYPD 9230. This course provides pharmacy students with knowledge and skills to develop and implement collaborative point-of-care testing programs. This HCOP elective will discuss the point-of-care test and treat process, including specimen collection, legal and management issues associated with point-of-care testing and follow-up care, and assessment of patients to determine if point-of-care testing is appropriate.

PYPD 9980 PHARMACY RESEARCH (1-3) LEC. 1-3. The student will be expected to learn to conduct independent research activity. The specific research topic will lie within the scope of the School of Pharmacy writ large and will be decided by the student's faculty research advisor. Course may be repeated for a maximum of 6 credit hours.