### Distance Degrees and Programs-School of Pharmacy

## University of Colorado Anschutz Medical Campus **Distance Degrees and Programs-School of Pharmacy** 2020-2021 Academic Year

The pharmacy curriculum is subject to change without notice. All courses are restricted to students in the Pharmacy Distance Degrees and Programs area. Pharmacy DDP students are advised to note the following courses' eligibility requirements and prerequisite information prior to registration; questions regarding curriculum should be directed to the academic program.

### PRDI 7000 US Pharmacy Practice Fundamentals

### Prerequisites: none.

This course provides students with the tactics necessary to perform dispensing duties in most US pharmacy settings and systems. The fundamentals of the practice of drug information are introduced. Eligible Students: ITPD students

#### **PRDI 7100 Patient Centered and Clinical Communications**

Prerequisites: none.

This course is designed to help students develop skills to communicate effectively with patients, caregivers and healthcare providers to facilitate the achievement of optimal patient outcomes. Eligible Students: ITPD students

#### PRDI 7150 Medical Terminology and Lab Interpretation

Prerequisites: none.

This course provides a review of medical terminology and laboratory interpretation with an emphasis on US pharmacy and medical terms and abbreviations. Students will also review the top 100 medications prescribed in the United States. Eligible Students: ITPD students

#### PRDI 7300 Introduction to Pharmacy Practice Experience- Session I

Prerequisites: none. Course designed to provide students with opportunities to practice skills and knowledge acquired from courses and apply them in various practice settings and with various professional groups.

Eligible Students: ITPD students

#### PRDI 7470 US Pharmacy Leadership and Management

Prerequisites: PRDI 7000, PRDI 7100, PRDI 7150, and PRDI 7300. Course provides students with an overview of fundamental principles of leadership. Attributes of effective leaders will be identified and discussed. An emphasis will be placed on identifying and cultivating personal leadership qualities to use throughout their pharmacy education and career.

**Eligible Students: ITPD students** 

### PRDI 7480 US Pharmacy Law and Regulatory Standards

Prerequisites: PRDI 7000, PRDI 7100, PRDI 7150, and PRDI 7300. Legal and ethical issues in US pharmacy practice are presented in this course in lectures, case studies and discussion group formats. Eligible Students: ITPD students

#### PRDI 7770 US Patient Centered Self-Care

Prerequisites: PRDI 7000, PRDI 7100, PRDI, 7150, PRDI 7300, and PRDO 7700 This course will prepare the student to be able to 1) collect appropriate patient data to make an assessment for self-care (e.g. nonprescription products), 2) conduct a patient-centered assessment, and 3) design, implement, evaluate and adjust a patient-

centered self-care plan.

Eligible Students: ITPD students

### PRDI 7900 Professional Skills Development

Prerequisites: PRDI 7000, PRDI 7100, PRDI 7300, PRDI 7150, PRDO 7800, and All Pharmacotherapy (except Oncology, ID, electives) Course intended to review and assess a broad range of skills necessary for current and future pharmacy practice. Designed to integrate and apply essential knowledge, skills and attitudes from didactic portion of curriculum are required for a successful professional career. Eligible Students: ITPD students

PRDI 7911 Professional Skills Portfolio I Prerequisites: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150.

First of two courses dedicated to the longitudinal Professional Skills Development portfolio. The goal of this course is to address students' individual and home country/community educational and practice needs, assess pharmacy educational competencies and document skill application.

Eligible Students: ITPD students

1

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#### PRDI 7912 Professional Skills Portfolio II

Prerequisites: PRDI 7000, PRDI 7100, PRDI 7300, PRDI 7150, and PRDI 7911.

Second of two courses dedicated to the longitudinal Professional Skills Development portfolio. The goal of this course is to address students' individual and home country/community educational and practice needs, assess pharmacy educational competencies and document skill application.

**Eligible Students: ITPD students** 

### PRDI 7920 Advanced Introductory Pharmacy Practice Experience

Prerequisites: PRDI 7000, PRDI 7100, PRDI 7150, PRDI 7300, PRDO 7800, PRDI 7470, PRDI 7480, PRDI 7770, PRDO 7490, and all Pharmacotherapy (except Oncology, ID, electives).

Course designed to provide students with introductory exposure to higher level patient care experiences, engagement in clinical pharmacy practice in a clinical setting, immersion in a clinical environment, and experiences to increase student confidence in their ability to learn.

Eligible Students: ITPD students

### PRDO 7011 Immunology I

Prerequisites: ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150. This course will teach the basic concepts of immunology, immunopathology, immunopharmacology and immunotherapy. Eligible Students: NTPD and ITPD students

### PRDO 7323 ADSM II-III Critical Care

Prerequisite: PRDO 7700 Course combines pathophysiology, advanced pharmacotherapeutics management, patient assessment, & professional skills development for critical care patients. Course may include case-based, team-based learning to provide opportunities for the application of clinical skills & knowledge in providing patient care.

Eligible Students: NTPD and ITPD students.

### PRDO 7331 ADSM III-I Pediatrics

Prerequisite: PRDO 7700

Course combines pathophysiology, advanced pharmacotherapeutics management, patient assessment, & professional skills development for disorders and issues of pediatric patients. Course may include case-based, team-based learning to provide opportunities for the application of clinical skills & knowledge in providing patient care. Eligible Students: NTPD and ITPD students.

### **PRDO 7400 Drug Information Fundamentals**

Prerequisites: ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150. Fundamentals of practice of drug information are introduced so students can retrieve, evaluate, and utilize professional and lay

information in a critical manner that enhances their practice of pharmacy, all in the context of the history and contemporary pharmacy practice.

Eligible Students: NTPD and ITPD students

#### PRDO 7412 Drug Information Portfolio I

Prerequisites: All students: PRDO 7400 ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150. First of two courses dedicated to the longitudinal DI portfolio. This portfolio is for students to learn, build competence and gain experience in application of acquired knowledge in DI. Course highlights communication and professional interpersonal skills. Eligible Students: NTPD and ITPD students

#### PRDO 7419 Drug Information Portfolio II

Prerequisites: All students: PRDO 7400, PRDO 7411 ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150. Second of two courses dedicated to the longitudinal DI portfolio. This portfolio is for students to learn, build competence and gain experience in application of acquired knowledge in DI. Course highlights communication and professional interpersonal skills. Eligible Students: NTPD and ITPD students

#### PRDO 7440 Evidence-Based Medicine and Literature Evaluation

### Prerequisites: New NTPD students: PRDO 7400 ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150 in addition to above courses.

This course provides an introduction and step-wise approach to evidence-based medicine. Knowledge gained from this course allows students to search for and understand published medical studies, research designs and statistical tests, and their application to clinical practice.

Eligible Students: NTPD and ITPD students

### **PRDO 7490 Healthcare Informatics**

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Prerequisites: ITPD students: PRDI 7000, PRDI 7100, PRDI 7150, PRDI 7300. NTPD students: PRDO 7700. Course will strengthen the skills necessary to allow practicing pharmacists to provide accurate, unbiased, and relevant drug information.

Eligible Students: NTPD and ITPD students

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### **PRDO 7561 Instructional Methods**

Prerequisites: NTPD (this course is for new students only): PRDO 7700, PRDO 7440 and 5 credit hours Pharmacotherapy; ITPD: PRDI 7000, PRDI 7100, PRDI 7300, PRDI 7150, PRDO 7700, PRDO 7440, and 5 credit hours Pharmacotherapy This course is designed to advance the presentation and teaching skills of participants. It focuses on the development of essential components of formal presentations, including learning objectives, outlines, and delivery skills. Eligible Students: NTPD and ITPD students

#### PRDO 7601 Public Health

Prerequisites: ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150. The purpose of this course is to provide an overview of the US healthcare system with insight into global health issues, their key components and their functional relationships. Eligible Students: NTPD and ITPD students

### PRDO 7602 Health Economics

Prerequisites: NTPD Students: PRDO 7601; ITPD students: PRDI 7000, PRDI 7100, PRDI 7150, PRDI 7300, and PRDO 7601. This course will cover economic evaluation techniques for pharmaceutical care, and how to use economic, clinical and humanistic outcomes research to understand and assess health care interventions and health care systems. Eligible Students: NTPD and ITPD students

### PRDO 7621 Interprofessional Educational Development – I

Prereguisites: ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150. Course allows students to develop competencies at the novice and advanced beginner levels in teamwork, collaboration, values, ethics, quality, and safety. It provides opportunities for application of competencies in Interprofessional teams; and prepares learners for future success in PRDO 7622.

Eligible Students: NTPD and ITPD students

#### PRDO 7622 Interprofessional Educational Development – II

### Prerequisites: For all students: PRDO 7621 ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150 in addition to above courses.

This course will continue in the development of skills learned in PRDO 7621 (a pre-requisite) allowing students to develop competencies at the novice and advanced beginner levels in teamwork and collaboration, values and ethics, and quality and safety. Eligible Students: NTPD and ITPD students

#### **PRDO 7700 Clinical Skills Foundations**

Prerequisites: All students: This course serves as a prerequisite for ADSM and Pharmacotherapy courses. ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150 in addition to above courses. Combines three components that provide foundation for ADSM courses: 1) orientation to patient assessment and skills development; 2) pharmacokinetics and pharmacodynamics; 3) advanced disease statement management for fluids, electrolytes, and acid-base disorders.

Eligible Students: NTPD and ITPD students

### PRDO 7710 Pharmacotherapy I-CV/Renal

Prerequisites: All students: PRDO 7700 ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150 in addition to above courses. Course combines pathophysiology, advanced pharmacotherapeutics management, patient assessment, & professional skills development for patients with common cardiovascular and renal disorders. Course may include case-based, team-based learning to provide opportunities for application of clinical skills & knowledge in providing patient care. Eligible Students: NTPD and ITPD students

#### PRDO 7720 Pharmacotherapy II-GI/Nutrition

Prerequisites: All students: PRDO 7700 ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150 in addition to above courses. Course combines pathophysiology, advanced pharmacotherapeutics management, drug-specific pharmacokinetics, patient assessment. & professional skills development for patients with gastrointestinal and nutrition disorders. Course may include casebased, team-based learning to provide opportunities for application of clinical skills & knowledge in patient care. Eligible Students: NTPD and ITPD students

#### PRDO 7730 Pharmacotherapy III-Infectious Diseases

Prerequisites: All students: PRDO 7700 ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150 in addition to above courses. Course combines pathophysiology, advanced pharmacotherapeutics management, basic patient assessment, & professional skills development for patients with infectious diseases. Course may include case-based, team-based learning to provide opportunities for the application of clinical skills & knowledge in providing patient care. Eligible Students: NTPD and ITPD students

#### PRDO 7741 Pharmacotherapy IV-I Oncology

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Prerequisites: All students: PRDO 7700; PRDO 7010 or PRDO 7011 strongly recommended ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150 in addition to above courses.

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1.0 cr.

Course combines pathophysiology, advanced pharmacotherapeutics management, basic patient assessment, & professional skills development for oncology disorders. The course incorporates the principles of active learning using lecture and interactive formats. Eligible Students: NTPD and ITPD students

#### PRDO 7742 Pharmacotherapy IV-II Bone and Connective Tissue Disorders

Prerequisites: All students: PRDO 7700; ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150 in addition to above courses

Course combines pathophysiology, advanced pharmacotherapeutics management, patient assessment, & professional skills development for patients with bone and connective tissue disorders. Course may include case-based, team-based learning to provide opportunities for the application of clinical skills & knowledge in patient care. Eligible Students: NTPD and ITPD students

#### **PRDO 7745 Palliative Care Pharmacotherapy**

Prerequisites: All students PRDO 7700; For NTPD: Strongly encourage PRDO 7741; For ITPD students: PRDI 7000, PRDI 7100, PRDI 7150 and PRDI 7300 in addition to above courses.

This course is designed to introduce the student to palliative care and hospice pharmacy practice. Students will learn the pathophysiology, pharmacotherapeutics, patient assessment, and communication skills necessary to manage pain and other complex symptoms in patients living with serious illness.

Eligible Students: Elective for NTPD and ITPD students

#### PRDO 7750 Pharmacotherapy V-Geriatrics/Neurology/Psychiatry

Prerequisites: All students: PRDO 7700; For ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150 in addition to above courses.

Course combines pathophysiology, advanced pharmacotherapeutics management, patient assessment, & professional skills development for geriatric, psychiatric, and neurological disorders. Course may include case-based, team-based learning to provide opportunities for application of clinical skills & knowledge in providing patient care.

Eligible Students: NTPD and ITPD students

#### PRDO 7760 Pharmacotherapy VI- Endocrine/Hematology/Pulmonology/Urologic/Gynecological

Prerequisites: All students: PRDO 7700; ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150 in addition to above courses.

Course combines pathophysiology, advanced pharmacotherapeutics management, patient assessment, & professional skills development for patients with endocrinology, hematology, pulmonology and gynecology/urologic disorders. Course may include case-based, team-based learning to provide opportunities for application of clinical skills & knowledge in patient care. Eligible Students: NTPD and ITPD students

### **PRDO 7775 Integrative Health and Medicine**

Prerequisites: All students: PRDO 7700 ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150 in addition to above courses. Elective course designed to develop a broad knowledge base in the field of Complementary and Alternative Medicine (CAM). Course will cover common vitamins and minerals, herbal products, and bio-identical hormones, touching on core CAM domains and discussions of regulatory issues.

Eligible Students: Elective for NTPD and ITPD students

#### PRDO 7780 Pharmacogenomics

Prerequisites: For NTPD students: PRDO 7700, PRDO 7400, PRDO 7440, PRDO 7710. For ITPD students: PRDI 7000, PRDI 7100, PRDI 7150, and PRDI 7300 in addition to above courses.

This course provides students with an understanding of how genetic factors influence drug disposition, response, and adverse effects. Knowledge gained from this course enhances students' ability to apply genetic information to pharmacy practice and select the most appropriate therapeutic intervention(s).

Eligible Students: NTPD and ITPD students

#### PRDO 7800 Clinical Reasoning and Decision Making

Prerequisites: For NTPD students: PRDO 7700, PRDO 7400, PRDO 7440, PRDO 7710, at least ONE of the following: PRDO 7720, PRDO 7750, or PRDO 7760. For ITPD students: PRDI 7000. PRDI 7100, PRDI 7150, and PRDI 7300 in addition to above courses.

Course is designed for students to become familiar with the clinical decision making process by incorporating various skills including basic principles of drug information, clinical knowledge, systems-based or governmental policies, and payer status applying these skills to patient-specific problems.

Eligible Students: NTPD and ITPD students

#### PRDO 7851 Clinical Capstone

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Prerequisites: PRDO 7700, PRDO 7800, PRDO 7710, PRDO 7720, PRDO 7742, PRDO 7750, and PRDO 7760. ITPD students: PRDI 7000, PRDI 7100, PRDI 7300, and PRDI 7150 in addition to above courses.

This course is designed to be a capstone that integrates essential core pharmacy practice topics. The philosophy of this course is to facilitate student learning and hold students accountable for prior learning in an integrated manner using complex patient scenarios. Eligible Students: NTPD and ITPD students

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#### **PRDO 7990 Clinical Pharmacy Skills**

#### Prerequisites: PRDO 7800

This course is designed to reinforce understanding of elements of pharmacy practice and professionalism. Students apply skills required to practice contemporary pharmacy. Students will apply patient-specific pharmacotherapy and evidence based medicine to formulate and communicate appropriate therapeutic decisions. Eligible Students: NTPD students with Department Consent.

#### Integrative Health and Medicine Graduate Certificate

#### PIHM 7741 Evidence-based Medicine and Literature I

First course in two part EBM courses This course provides an introduction and step-wise approach to evidence-based medicine. Knowledge gained from this course allows students to search for and understand published medical studies, commonly-used research designs and statistical tests, and their application to clinical practice. Students will be provided with the ability to apply a systematic approach to answer drug information requests such as those associated with CAM. Eligible Students: Must be enrolled in the Integrative Health and Medicine Graduate Certificate Program

#### PIHM 7442 Evidence-based Medicine in Integrated Health & Medicine II

This course provides an introduction and step-wise approach to evidence-based medicine. Knowledge gained from this course allows students to search for and understand published medical studies, commonly-used research designs and statistical tests, and their application to clinical practice. Students will be provided with the ability to apply a systematic approach to answer drug information requests such as those associated with CAM. Eligible Students: Must be enrolled in the Integrative Health and Medicine Graduate Certificate Program

#### **PIHM 7670 Pharmacology of Integrative Medicines**

This course will describe the science of botanical products used to treat human disease, including traditional plant and animal based medicines (primarily from China and India), herbal medicines, essential oils, homeopathic remedies, and dietary supplements. In addition it will examine active compound structures and their naturally occurring derivatives, including structure-activity relationships, known molecular targets, and modes of action. Eligible Students: Must be enrolled in the Integrative Health and Medicine Graduate Certificate Program

#### **PIHM 7680 Integrative Health in Common Clinical Diseases**

This course will focus on clinical applications of integrative health in common diseases, including diabetes, hypertension, dyslipidemia, digestive disorders, ENT & respiratory disorders, food allergies, arthritis, musculoskeletal and autoimmune disorders, oncology, metabolic syndrome, men's and women's health, pain and CNS disorders. This course will also consider bioethical issues associated with CAM use in clinical practice. Eligible Students: Must be enrolled in the Integrative Health and Medicine Graduate Certificate Program

#### PIHM 7775 Introductory and Applied Integrative Health & Medicine I

This course is foundational, designed to develop a broad understanding of integrative medicine. It introduces core IHM domains, familiarizes students with the most common herbal products utilized by consumers, discusses regulatory issues and strategies for identifying good sources of products, and touches on popular therapies including bio-identical hormones. Opportunities are provided to enhance problem solving, literature searching, and communication skills. Eligible Students: Must be enrolled in the Integrative Health and Medicine Graduate Certificate Program

#### PIHM 7778 Introductory and Applied Integrative Health & Medicine II

This course builds upon the foundation established from the Introductory and Applied Integrative Health & Medicine I, expanding students' knowledge base in integrative medicine. It covers common domains, such as aromatherapy, homeopathy, chiropractic medicine and mindfulness medicine. Opportunities are provided for students to continue to develop their problem-solving, literature searching, and communication skills. Eligible Students: Must be enrolled in the Integrative Health and Medicine Graduate Certificate Program

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1.5 cr.

### 2.0 cr.

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1.0 cr.

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#### Master of Science in Clinical Pharmacy

#### **Required Courses**

#### PRDM 7150 – Medical Terminology and Lab Interpretation

### Perquisites: none

This course provides a review of medical terminology and laboratory interpretation with an emphasis on US pharmacy and medical terms and abbreviations. Students will also review the top 100 medication prescribe in the United States. Eligible students: <u>Must be enrolled in the Master of Science in Clinical Pharmacy Program</u>

### PRDM 7700 – Clinical Skills Foundation

### Perquisites: none

This course combines three components that provide foundation for ADSM courses: 1) orientation to patient assessment and skills development; 2) pharmacokinetics and pharmacodynamics; 3) advanced disease state management for fluids, electrolytes, and acidbase disorders. Eligible students: <u>Must be enrolled in the Master of Science in Clinical Pharmacy Program</u>

### PRDM 7400 – Drug Information Fundamentals

#### Perquisites: none

The fundamentals of practice of drug information are introduced so students can retrieve, evaluate, and utilize professional and lay information in a critical manner that enhances their practice of pharmacy, all in the context of the history and contemporary pharmacy practice. Eligible students: <u>Must be enrolled in the Master of Science in Clinical Pharmacy Program</u>

#### PRDM 7413 – Masters Drug Information Portfolio

Perquisites: PRDM 7150, PRDM 7700 and PRDM 7400

This longitudinal portfolio is for CPM students to learn, build competence and gain experience in the application of acquired drug information knowledge. It is based on a nearly identical longitudinal course offered in the NTPD and ITPD program. Eligible students: <u>Must be enrolled in the Master of Science in Clinical Pharmacy Program</u>

#### PRDM 7913 – Professional Skills Portfolio

#### Perquisites: PRDM 7150, PRDM 7700 and PRDM 7400

In this longitudinal portfolio course, students will document specific skills, assignments and other activities completed in their local (ie home) workplace setting that demonstrate achievement of each of the above. Students will reflect on their learning, providing insight into successes and where further improvement is needed. It is based on a nearly identical longitudinal course offered in the ITPD program. Eligible students: <u>Must be enrolled in the Master of Science in Clinical Pharmacy Program</u>

#### PRDM 7621 – Interprofessional Leadership and Development I

#### Perquisites: none

These courses allow students to develop competencies at the novice and advanced beginner levels in teamwork and collaboration, values and ethics, and quality and safety. Eligible students: <u>Must be enrolled in the Master of Science in Clinical Pharmacy Program</u>

### PRDM 7622- Interprofessional Leadership and Development II

Perquisites: PRDM 7621

Interprofessional Leadership and Development II- Continuation for students to develop competencies at the novice and advanced beginner levels in teamwork and collaboration, values and ethics, and quality and safety. Eligible students: <u>Must be enrolled in the</u> Master of Science in Clinical Pharmacy Program

achieve the course requirements. Eligible students: Must be enrolled in the Master of Science in Clinical Pharmacy Program

#### PRDM 7561 –Instructional Methods/Research

Perquisites: PRDM 7700, 7440, & 5.0 credit hours of pharmacotherapy courses. This course is designed to advance the participant's presentation and teaching skills. It focuses on the development of essential components of formal presentations, including learning objectives, outlines, and delivery skills. Participants use a clinical question to

PRDM 7440 –Evidence-Based Medicine & Literature Evaluation
Perquisites: PRDM 7400

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This course provides an introduction and step-wise approach to evidence-based medicine. Knowledge gained from this course allows students to search for and understand published medical studies, research designs and statistical tests, and their application to clinical practice. Eligible students: <u>Must be enrolled in the Master of Science in Clinical Pharmacy Program</u>

#### PRDM 7800 – Clinical Reasoning & Decision Making

Perquisites: PRDM 7700, 7710, 7440; one or more of the following pharmacotherapy courses 7720, 7750, 7760. This course is designed for students to become familiar with the clinical decision making process by incorporating various skills including basic principles of drug information, clinical knowledge, systems-based or governmental policies, and payer status applying these skills to patient-specific problems. Eligible students: <u>Must be enrolled in the Master of Science in Clinical Pharmacy Program</u>

#### 0.5 cr.

1 cr.

# 1 cr.

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#### 0.5 cr.

0.5 cr.

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# 3 cr.

#### **PRDM 7851 Clinical Capstone**

Perquisites: PRDM 7700, 7400, 7710, 7800 at least TWO of the following: 7720, 7750, or 7760

This course is designed to be a capstone that integrates essential core pharmacy practice topics. The philosophy of this course is to facilitate student learning and hold students accountable for prior learning in an integrated manner using complex patient scenarios. Eligible students: <u>Must be enrolled in the Master of Science in Clinical Pharmacy Program</u>

#### PRDM 8001 – MS Capstone Thesis Foundations

Prerequisites: PRDM 7400, PRDM 7440, PRDM 7800 and PRDM 7851

This course provides fundamentals in research and clinical pharmacy project types, allowing students to choose a topic, then plan and execute that project. The course requires successful live presentation of project proposal. It serves as a prerequisite to the longitudinal project course, to be completed throughout the program. Eligible students: <u>Must be enrolled in the Master of Science in</u> <u>Clinical Pharmacy Program</u>

#### PRDM 8002 – MS Capstone Thesis Project

Prerequisites: PRDM 8001

This course requires completion of a clinical pharmacy thesis project, whose topic and plan must be approved in PRDM 8001. It is designed to provide patient-centered pharmacy care and is completed during the student's time in the MS Clinical Pharmacy program. Successful completion includes a poster, live presentation and a manuscript. Eligible students: <u>Must be enrolled in the Master of Science in Clinical Pharmacy Program</u>

#### Pharmacotherapy core – Must complete at least 8 credit hours

#### PRDM 7710 – Pharmacotherapy I – CV/Renal

Prerequisites: PRDM 7700

This course combines pathophysiology, advanced pharmacotherapeutics management, patient assessment, and professional skills development for patients with common cardiovascular and renal disorders. Course may include case-based, team-based learning to provide opportunities for application of clinical skills and knowledge in providing patient care. <u>Must be enrolled in the Master of Science in Clinical Pharmacy Program</u>

#### PRDM 7720 - Pharmacotherapy II - GI/Nutrition

Prerequisites: PRDM 7700

This course combines pathophysiology, advanced pharmacotherapeutics management, drug-specific pharmacokinetics, patient assessment, and professional skills development for patients with gastrointestinal and nutrition disorders. Course may include casebased, team-based learning to provide opportunities for application of clinical skills and knowledge in patient care. Eligible students: Must be enrolled in the Master of Science in Clinical Pharmacy Program

#### PRDM 7730 – Pharmacotherapy III – Infectious Diseases

Prerequisites: PRDM 7700

This course combines pathophysiology, advanced pharmacotherapeutics management, basic patient assessment, and professional skills development for patients with infectious diseases. Course may include case-based, team-based learning to provide opportunities for the application of clinical skills and knowledge in providing patient care. <u>Must be enrolled in the Master of Science in Clinical Pharmacy Program</u>

#### PRDM 7741 – Pharmacotherapy IV-I – Oncology

Prerequisites: PRDM 7700

This course combines pathophysiology, advanced pharmacotherapeutics management, basic patient assessment, and professional skills development for oncology disorders. The course incorporates the principles of active learning using lecture and interactive formats. <u>Must be enrolled in the Master of Science in Clinical Pharmacy Program</u>

### PRDM 7750 – Pharmacotherapy V – Geriatrics, Neurology, Psychiatry

### Prerequisites: PRDM 7700

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This course combines pathophysiology, advanced pharmacotherapeutics management, patient assessment, and professional skills development for geriatrics, psychiatric, and neurological disorders. Course may include case-based, team-based learning to provide opportunities for application of clinical skills and knowledge in providing patient care. <u>Must be enrolled in the Master of Science in Clinical Pharmacy Program</u>

### PRDM 7760 – Pharmacotherapy VI – Pulmonary, Hematology, Gynecology, and Endocrine Disorders Prerequisites: PRDM 7700

This course combines pathophysiology, advanced pharmacotherapeutics management, patient assessment, and professional skills development for patients with endocrinology, hematology, pulmonology, and gynecology/urologic disorders. Course may include case-based, team-based learning to provide opportunities for application of clinical skills and knowledge in patient care. <u>Must be enrolled in the Master of Science in Clinical Pharmacy Program</u>

Healthcare systems: Must complete at least 2 credit hours PRDM 7601 – Public Health Prerequisites: none 3.5 cr.

0.5 cr.

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2.5 cr.

#### 2 cr.

2.0 cr.

3 cr.

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This course provides an overview of the US healthcare system with insight into global health issues, their key components and their functional relationships. Must be enrolled in the Master of Science in Clinical Pharmacy Program

### PRDM 7602 – US Based Health Economics

#### Prerequisites: PRDM 7601

This course covers economic evaluation techniques for pharmaceutical care, and how to use economic clinical and humanistic outcomes research to understand and assess health care interventions and health care systems. Must be enrolled in the Master of Science in Clinical Pharmacy Program

### PRDM 7470 – US Pharmacy Leadership and Management

Prerequisites: PRDM 7601

This course provides students with an overview of fundamental principles of leadership. Attributes of effective leaders will be identified and discussed. An emphasis will be placed on identifying and cultivating personal leadership qualities to use throughout their pharmacy education and career. Must be enrolled in the Master of Science in Clinical Pharmacy Program

### PRDM 7490 – Healthcare Informatics

Prerequisites: PRDM 7700

This course strengthens the skills necessary to allow practicing pharmacists to provide accurate, unbiased, and relevant drug information. Must be enrolled in the Master of Science in Clinical Pharmacy Program

#### **Electives:**

## PRDM 7742 – Pharmacotherapy IV-II – Bone and Connective Tissue Disorders

Prerequisites: PRDM 7700

This course combines pathophysiology, advanced pharmacotherapeutics management, patient assessment, and professional skills development for patients with bone and connective tissue disorders. Course may include case-based, team-based learning to provide opportunities for the application of clinical skills and knowledge in patient care. Must be enrolled in the Master of Science in Clinical Pharmacy Program

#### PRDM 7323 – Pharmacotherapy – Critical Care

### Prerequisites: PRDM 7700

This course combines pathophysiology, advanced pharmacotherapeutics management, patient assessment, and professional skills development for critical care patients. Course may include case-based, team-based learning to provide opportunities for the application of clinical skills and knowledge in providing patient care. Must be enrolled in the Master of Science in Clinical Pharmacy Program

#### PRDM 7331 – Pharmacotherapy – Pediatrics

Prerequisites: PRDM 7700

This course combines pathophysiology, advanced pharmacotherapeutics management, patient assessment, and professional skills development for disorders and issues of pediatrics patients. Course may include case-based, team-based learning to provide opportunities for the application of clinical skills and knowledge in providing patient care. Must be enrolled in the Master of Science in Clinical Pharmacy Program

#### PRDM 7745 – Palliative Care Pharmacotherapy

Prerequisites: PRDM 7700 and PRDM 7741 (Strongly Recommended)

#### This course is designed to introduce the student to palliative care and hospice pharmacy practice. Students will learn the pathophysiology, pharmacotherapeutics, patient assessment, and communication skills necessary to manage pain and other complex symptoms in patients living with serious illness. Must be enrolled in the Master of Science in Clinical Pharmacy Program

#### PRDM 7780 – Pharmacogenomics

Prerequisites: Should be PRDM 7700, 7400, 7440, 7710

This course provides students with an understanding of how genetic factors influence drug disposition, response, and adverse effects. Knowledge gained from this course enhances students' ability to apply generic information to pharmacy practice and select the most appropriate therapeutic intervention(s). Must be enrolled in the Master of Science in Clinical Pharmacy Program

#### PRDM 7775 - Integrated Health and Medicine

#### Prerequisites: none

Prerequisites: none

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This course is designed to develop a broad knowledge base in the field of Complementary and Alternative Medicine (CAM). Course will cover common vitamins and minerals, herbal products, and bio-identical hormones, touching on core CAM domains and discussions of regulatory issues. Must be enrolled in the Master of Science in Clinical Pharmacy Program

#### Cannabis Science and Medicine Graduate Certificate

#### PCSM 6710 – Cannabis Therapeutics Neurology/Mental Health

The evidence-based risks and benefits of cannabis and/or FDA-approved and investigational cannabis-derived

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drugs will be discussed in epilepsy and movement disorders, sleep, and migraine. Cannabis use in various mental health conditions will be presented, including depression, anxiety, post-traumatic stress, and schizophrenia. <u>Must be enrolled in the Cannabis Science and Medicine Graduate Certificate Program</u>

### PCSM 6720 – Cannabis Therapeutics Pain/Oncology

Prerequisites: none

The evidence-based risks and benefits of cannabis and/or FDA-approved and investigational cannabis-derived drugs will be discussed in management of various types of pain, and their supportive role in oncology. Patient safety considerations, including drug-cannabis interactions, and at-risk populations with cannabis use will be presented. <u>Must be enrolled in the Cannabis Science and Medicine Graduate Certificate Program</u>

### PCSM 6730 Legal & Regulatory Issues in Cannabis Medicine

Prerequisites: none

The legal history of cannabis and industrial hemp in the United States and the current diversity of state and federal regulations governing the sale and use of cannabis and cannabis-derived medicinal and retail products will be discussed, as well as how these regulations influence basic science and clinical research on cannabis. <u>Must be enrolled in the Cannabis Science and Medicine</u> <u>Graduate Certificate Program</u>

#### PCSM 7700 Cannabis Pharmacology & Physiology

Prerequisites: none

This course addresses the history, botany, medicinal chemistry and pharmacology of active constituents in cannabis and hemp, with particular emphasis on their interplay with endogenous cannabinoids and the endocannabinoid system of the body. FDA-approved cannabinoid products and synthetic cannabinoids will also be discussed. <u>Must be enrolled in the Cannabis Science and Medicine Graduate Certificate Program</u>

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