

DOCTOR OF PHARMACY PROGRAM – CURRICULAR OUTCOMES
Approved November 22, 2016

Domain 1 – Foundational Knowledge

- 1.0. **Learner (Learner)** - Develop, integrate, and apply knowledge from the foundational sciences (i.e. biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences) to evaluate the scientific literature, explain drug action, solve therapeutic problems, and advance population health and patient-centered care.
- 1.1. Develop and demonstrate depth and breadth of knowledge in the biomedical and pharmaceutical sciences.
- 1.1.1. Describe and apply biochemistry, physiology and pathophysiology with respect to common disease processes and their management.
 - 1.1.2. Describe the molecular, chemical, and physical properties and the application of common pharmaceutical dosage forms.
 - 1.1.3. Identify and explain the molecular, chemical, and physical basis of drug/drug and drug/excipient incompatibilities.
 - 1.1.4. Describe and apply the knowledge of the molecular, chemical, biochemical, genomic, physiologic and pathophysiologic basis of drug action, interaction, and adverse effects for major categories of drugs.
 - 1.1.5. Describe and apply knowledge of the molecular, biochemical, and physiological basis of the drug absorption, distribution, metabolism, and excretion (ADME) process.
- 1.2. Develop and demonstrate depth and breadth of knowledge in the social, behavioral and administrative sciences. Such knowledge and abilities include but are not limited to the following:
- 1.2.1. Describe and define health literacy, cultural competency, and psychosocial principles of health care and incorporate those principles into pharmacy practice and patient care plans.
 - 1.2.2. Describe and define the legal, ethical, social, economic, health policy, and professional standards of pharmacy practice and interprofessional collaboration and apply these standards to guide the practice of pharmacy.
 - 1.2.3. Develop and implement evidence-based programs based upon interpretation and analysis of pharmacoepidemiology, pharmaco-economic, and medication-use data.
 - 1.2.4. Describe and define appropriate professional communication techniques and apply those techniques in documenting and relaying pharmacist patient care activities.
 - 1.2.5. Describe and define the research design, biostatistics, and drug information principles and apply those principles to locate, evaluate and use the scientific literature.
 - 1.2.6. Describe and apply the appropriate methods to prepare, dispense, distribute and administer prescriptions and medication orders in a manner that ensures safe and effective delivery of pharmacy services and medications to the patient.
 - 1.2.7. Describe and utilize the appropriate medication use systems, risk mitigation, adherence/compliance/persistence strategies, and quality improvement strategies to provide effective pharmacy services.
- 1.3. Develop and demonstrate depth and breadth of knowledge in the clinical sciences. Such knowledge and abilities include but are not limited to the following:
- 1.3.1. Use information technology, including electronic health records, to retrieve and analyze data for use in individual and population patient care.

- 1.3.2. Describe basic pharmacokinetic and pharmacogenomics principles and apply those principles to determine the safe and effective doses of drugs for individual patients, and adjust therapy as appropriate.
- 1.3.3. Describe and apply the inter-relations and interactions among drug-drug, drug-disease, drug-food, and drug-laboratory test interactions to properly assess and manage common diseases and disorders.
- 1.3.4. Describe the general principles of pharmacotherapy, self-care and patient safety and apply those general principles in the development of individualized and population evidence-based care to manage common diseases and disorders.

Domain 2 – Essentials for Practice and Care

- 2.1. **Patient-centered care (Caregiver)** - Provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities).
 - 2.1.1. Collect and interpret subjective and objective evidence related to patient characteristics, medications, allergies, adverse reactions, and diseases from chart/electronic health records, pharmacist records and patient and family interviews.
 - 2.1.2. Perform, interpret and document select components of a physical examination.
 - 2.1.3. Prioritize patient needs and formulate evidence-based care plans, including assessments, therapeutic goals, education and management recommendations, and monitoring plans.
 - 2.1.4. Implement, monitor, assess, adjust, document, and communicate individualized patient care plans.

- 2.2. **Medication use systems management (Manager)** - Manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems.
 - 2.2.1. Describe and participate in common medication use systems.
 - 2.2.2. Describe the role of the pharmacist in common medication use systems, including medication procurement, storage, prescribing, transcription, dispensing, administration, monitoring, and documentation.
 - 2.2.3. Identify and utilize resources and systems to optimize medication use systems.
 - 2.2.4. Apply standards, guidelines, best practices, and established processes related to safe and effective medication use and transitions of care.

- 2.3. **Health and wellness (Promoter)** - Design prevention, intervention, and educational strategies for individuals and communities to manage common disease and improve health and wellness.
 - 2.3.1. Evaluate personal, social, economic, and environmental conditions that impact community health and wellness.
 - 2.3.2. Describe systematic preventive care, including risk assessment, risk reduction, screening, health promotion and education, and immunization activities.
 - 2.3.3. Develop and implement prevention, intervention, and educational strategies for individuals and communities in order to improve health and wellness.
 - 2.3.4. Collaborate with interprofessional healthcare team members in the management and health promotion for patients.

- 2.4. **Population-based care (Provider)** - Describe how population-based care influences patient-centered care and influences the development of practice guidelines and evidence-based best practices.
 - 2.4.1. Describe, develop and provide evidence-based, medication-based care approaches that meet the healthcare needs of a targeted patient population.
 - 2.4.2. Assess population health medication-based care and provide potential solutions to optimize health outcomes.

Domain 3 - Approach to Practice and Care

- 3.1. Problem Solving (Problem Solver)** – Design, implement, and evaluate a viable solution to identified problems through exploration and prioritization of strategies.
 - 3.1.1. Collect and analyze pertinent information to identify and assess the major problems and likely causes of a problem or issue.
 - 3.1.2. Develop, compare and contrast, and prioritize potential solutions and plans to address or resolve the problem.
 - 3.1.3. Select, implement and monitor the most viable solution, including the measurement of intended and unintended consequences.
 - 3.1.4. Evaluate the process and outcome of the solution for quality improvement.

- 3.2. Educator (Educator)** – Educate all audiences by determining the most effective and enduring techniques and strategies to impart information, achieve learning objectives, and assess understanding.
 - 3.2.1. Determine the primary and secondary goals of the educational encounter.
 - 3.2.2. Select and utilize pertinent, reputable resources of healthcare information that is relevant for the topic and the intended audience.
 - 3.2.3. Design and deliver well-organized, pertinent and effective educational activities using appropriate materials and methods.
 - 3.2.4. Coordinate educational efforts with other healthcare providers to ensure a consistent, comprehensive, and team-based encounter.
 - 3.2.4. Develop methods to evaluate the educational process

- 3.3. Patient Advocacy (Advocate)** - Assure that patients’ best interests are represented.
 - 3.3.1. Provide patients with resources and assistance to take responsibility for their own healthcare and to navigate the healthcare system.
 - 3.3.2. Develop individualized care plans that reflect the patient’s and caregiver’s concerns, desires and needs.

- 3.4. Interprofessional collaboration (Collaborator)** – Actively participate and engage as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs.
 - 3.4.1. Define the roles and responsibilities for team members needed to optimize outcomes for specific patient care encounters.
 - 3.4.2. Consult and collaborate with other healthcare professionals in a manner that promotes respect for others and shared responsibility, problem solving and decision making.

- 3.5. Cultural sensitivity (Includer)** - Recognize social determinants of health to diminish disparities and inequities in access to quality care.
 - 3.5.1. Demonstrate respect and regard for different cultures by considering their beliefs and practices into health and wellness care plans, while avoiding biases and stereotyping.

- 3.6. Communication (Communicator)** – Clearly communicate when interacting with an individual, group, or organization.
 - 3.6.1. Communicate, interview, and gather information from patients and healthcare professionals effectively and confidently.

- 3.6.2. Demonstrate effective interpersonal skills and empathy to establish rapport and build trusting relationships.
- 3.6.3. Assess a patient's health literacy and modify communication strategies to meet the patient's needs.

Domain 4 – Personal and Professional Development

- 4.1. Self-awareness (Self-aware)** – Examine and reflect on personal and professional knowledge, skills, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth.
- 4.1.1. Identify, create, implement, evaluate and modify personal and professional goal setting and achievement plans for the purpose of individual growth.
 - 4.1.2. Identify personal and professional strengths and weaknesses in personal and professional abilities.
 - 4.1.3. Utilize needed resources to develop a plan to enhance and maintain personal and professional abilities.
- 4.2. Leadership (Leader)** - Demonstrate responsibility for creating and achieving personal and shared goals, regardless of position.
- 4.2.1. Describe leadership models and the characteristics of effective leadership.
 - 4.2.2. Identify and define personal and professional values.
 - 4.2.3. Perform activities that have a positive impact on others.
- 4.3. Innovation and Entrepreneurship (Innovator)** - Engage in innovative activities by using creative thinking to envision better ways of accomplishing professional goals.
- 4.3.1. Develop new ideas and approaches or enhance current approaches to improve the design and delivery of pharmacy services.
 - 4.3.2. Describe and define innovation and entrepreneurialism and provide examples of each that apply to the practice of pharmacy or health care.
- 4.4. Professionalism (Professional)** - Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society.
- 4.4.1. Demonstrate respect, compassion, integrity, accountability, responsibility and dependability.
 - 4.4.2. Demonstrate personal and professional development through ongoing self-directed learning and self-reflection.
 - 4.4.3. Demonstrate a commitment to caring for and advocating for patients.
 - 4.4.4. Actively participate in continuous quality improvement of services, processes and products involved in the delivery of pharmacy and health care.