Learning Outcomes for the Doctor of Pharmacy Program

NOTE: The sub-topics for each learning outcome are listed in the tables. These can help you understand what is meant by the broader learning outcome. Use these as a guide to determine whether the assignment/activity you participated in helped you toward achieving the learning outcome.

Domain 1 – Foundational Knowledge

1.1 Learner (Learner) - **Develop, integrate, and apply knowledge from the foundational sciences (i.e., pharmaceutical, social/behavioral/administrative, health, and clinical sciences) to evaluate the scientific literature, explain drug action, solve therapeutic problems, and advance population health and patient- centered care.**

1.1.1. Develop and demonstrate depth and breadth of knowledge in pharmaceutical, social/behavioral/ administrative, health and clinical sciences.
1.1.2. Articulate how knowledge in foundational sciences is integral to clinical reasoning; evaluation of future advances in medicine and pharmacy; supporting health and wellness initiatives; and delivery of contemporary pharmacy services.
1.1.3. Integrate knowledge from foundational sciences to explain the way specific drugs or drug classes work and evaluate their potential value in individuals and populations.
1.1.4. Apply knowledge in foundational sciences to solve therapeutic problems and advance patient-centered care and population-based care.
1.1.5. Critically analyze and assimilate evidence from scientific literature related to drugs and disease to enhance clinical decision making.
1.1.6. Identify, critically analyze, and assimilate emerging theories, information, and technologies that may impact patient-centered and population-based care.

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, foster patient support and empowerment, implement, monitor and adjust plans, and document activities).

2.1.1. Collect subjective and objective evidence related to the patient, medications, allergies/adverse reactions, and disease(s), by performing patient assessment (including physical assessment, screenings, and risk assessments scores when needed) from chart/electronic health records, pharmacist records, and discussions with other health professionals and the patient/family/care-giver.
2.1.2. Interpret evidence and patient data.
2.1.3. Prioritize patient needs.
2.1.4. Formulate an evidence-based care plan, assessment, and recommendation.

2.1.5. Implement and/or recommend patient care plans.
2.1.6. Monitor the patient and adjust the care plan as needed.
2.1.7. Document patient care related activities.

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. Compare and contrast the components of typical medication use systems in different pharmacy practice settings.
2.2.2. Describe the role of the pharmacist in impacting the safety and efficacy of each component of a typical medication use system (i.e., procurement, storage, prescribing, transcription, dispensing, administration, monitoring, and documentation).
2.2.3. Utilize technology that is a component to or of the medication use system.
2.2.4. Identify and utilize human, financial, and physical resources to optimize the medication use system.
2.2.5. Manage medication needs of patients during transitions of care.
2.2.6. Apply standards, guidelines, best practices, and established processes related to safe and effective medication use.
2.2.7. Utilize continuous quality improvement techniques in the medication use process and participate in identifying system errors and, when possible, implement solutions.
2.2.8. Demonstrate the ability to compound extemporaneous and commercially available dosage forms, dispense, and administer medications in a variety of healthcare settings.
2.2.9. Apply legal, ethical, and professional standards within a medication use system.
2.2.10. Apply the principles of human resource management to manage pharmacy personnel.
2.2.11. Demonstrate knowledge of and an ability to use medical informatics.
2.2.12. Demonstrate the ability to apply a systems approach to improve patient (medication) safety.

2.3 Health and wellness (Promoter) - Design prevention, intervention, and educational strategies for individuals and communities to manage disease and improve health and wellness.

2.3.1. Describe systematic preventive care, using risk assessment, risk reduction, screening, education, and immunizations.
2.3.2. Provide prevention, intervention, and educational strategies for individuals and communities to improve health and wellness.
2.3.3. Participate with interprofessional healthcare team members in the management of, and health promotion for patients.
2.3.4. Evaluate personal, social, economic, and environmental conditions to maximize health and wellness.

2.4 Population-based care (Provider) - Describe the way in which *population-based care* influences *patient-centered care* and influences the development of practice guidelines and evidence-based best practices.

2.4.1. Assess the healthcare status and needs of a targeted patient population.
2.4.2. Develop and provide an evidence-based approach to care that considers the cost, care, access, and satisfaction needs of a targeted patient population.
2.4.3. Participate in actual or simulated population health management by evaluating and adjusting interventions to improve health.

Domain 3 - Approach to Practice and Care

3.1 Problem Solving (Problem Solver) - Identify problems; explore and prioritize potential strategies; and design, implement, and evaluate a viable solution.

3.1.1. Identify and define all relevant problems.
3.1.2 Select between the primary as well as secondary problems.
3.1.3. Define goals and alternative goals.
3.1.4. Explore multiple solutions by organizing, prioritizing, and defending each possible solution.
3.1.5. Anticipate positive and negative outcomes by reviewing assumptions, inconsistencies, and unintended consequences.
3.1.6. Recommend and/or implement the most viable solution, including monitoring parameters, to measure intended and unintended consequences.
3.1.7. Reflect on the solution implemented and its effects to improve future performance.

3.2 Educator (Educator) - Educate all audiences by determining the most effective and enduring ways to impart information and assess understanding.

3.2.1. Conduct a learning needs assessment of constituents who would benefit from pharmacist-delivered education (e.g., patients/caregivers, technicians and interns, pharmacy students, fellow pharmacists, other healthcare providers, legislators).
3.2.2. Develop learning objectives.
3.2.3. Select the most effective techniques/strategies to achieve learning objectives.
3.2.4. Demonstrate the ability to coordinate educational efforts with other healthcare providers, when appropriate, to ensure a consistent, comprehensive, and team-based encounter.
3.2.5. Ensure instructional content contains the most current information relevant for the intended audience.
3.2.6. Demonstrate the ability to deliver educational messages via various techniques such as one-on-one discussions, oral presentations, and written materials.
3.2.7. Assess audience comprehension of the educational session.

3.3 Patient Advocacy (Advocate) - Assure that patients' best interests are represented.

3.3.1. Empower patients to take responsibility for, and control of, their health.
3.3.2. Assist patients in navigating through the healthcare system.
3.3.3. Assist patients in obtaining the resources and care required in an efficient and cost-effective manner (e.g., triage to social and/or other healthcare services).

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. Establish a climate of shared values and mutual respect necessary to meet patient care needs.
3.4.2. Define clear roles and responsibilities for team members to optimize outcomes for specific patient care encounters.
3.4.3. Communicate in a manner that values team-based decision making and shows respect for contributions from other areas of expertise.
3.4.4. Foster accountability and leverage expertise to form a highly functioning team (one that includes the patient, family, and community) and promote shared patient-centered problem solving.

3.5 Cultural Sensitivity (Includer) - Recognize social determinants of health to diminish disparities and inequities in access to quality care.

3.5.1. Recognize the collective identity and norms of different cultures without overgeneralizing (i.e., recognize and avoid biases and stereotyping).
3.5.2. Demonstrate an attitude that is respectful of different cultures.
3.5.3. Assess a patient's health literacy and modify communication strategies to meet the patient's needs.
3.5.4. Safely and appropriately incorporate patients' cultural beliefs and practices into health and wellness care plans.

3.6 Communication (Communicator) - Effectively communicate verbally and nonverbally when interacting with an individual, group, or organization.

3.6.1. Interview and/or counsel patients/care givers using an organized structure, specific questioning techniques (e.g., motivational interviewing), and medical terminology adapted for the audience.
3.6.2. Actively listen and ask appropriate open and closed-ended questions to gather information.
3.6.3. Use available technology and other media to assist with communication as appropriate.
3.6.4. Use effective interpersonal skills to establish rapport and build trusting relationships.
3.6.5. Communicate assertively, persuasively, confidently, and clearly.
3.6.6. Demonstrate empathy when interacting with others.
3.6.7. Deliver and obtain feedback to assess learning and promote goal setting and goal attainment.
3.6.8. Develop professional documents pertinent to organizational needs (e.g., monographs, policy

documents).
3.6.9. Document patient care activities clearly, concisely, and accurately using appropriate medical terminology, standardized qualitative and quantitative methods, and/or uniform coding systems.
3.6.10. Participate in the examination of a practice site's commitment, capacity, and efforts to meet the communication needs of the populations served by the practice environment.

Domain 4 – Personal and Professional Development

4.1 Self-awareness (Self-aware) - **Examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth.**

4.1.1. Use metacognition to regulate one's own thinking and learning.
4.1.2. Maintain motivation, attention, and interest (e.g., habits of mind) during learning and work-related activities.
4.1.3. Identify, create, implement, evaluate, and modify plans for personal and professional development for the purpose of individual growth.
4.1.4. Approach tasks with a desire to learn.
4.1.5. Demonstrate persistence and flexibility in various situations; engaging in help seeking behavior when appropriate.
4.1.6. Strive for accuracy and precision by displaying a willingness to recognize, correct, and learn from errors.
4.1.7. Use constructive coping strategies to manage stress.
4.1.8. Seek personal, professional, or academic support to address personal limitations.
4.1.9. Display positive self-esteem and confidence when working with others.
4.1.10. Demonstrate the ability to be a self-directed lifelong learner.

4.2 Leadership (Leader) - **Demonstrate responsibility for creating and achieving shared goals, regardless of position.**

4.2.1. Identify, compare, and contrast the characteristics that reflect leadership versus management.
4.2.2. Identify the history (e.g., successes and challenges) of a team before implementing changes.
4.2.3. Develop relationships, value diverse opinions, and utilize individuals' strengths and weaknesses to promote teamwork.
4.2.4. Persuasively communicate goals to the team to help build consensus.
4.2.5. Empower team members by actively listening, gathering input or feedback, and fostering collaboration.

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. Demonstrate initiative when confronted with challenges.
4.3.2. Develop new ideas and approaches to improve quality or overcome barriers to advance the profession.
4.3.3. Demonstrate creative decision making when confronted with problems or challenges.
4.3.4. Assess personal strengths and weaknesses in entrepreneurial skills.
4.3.5. Apply entrepreneurial skills within a real or simulated entrepreneurial activity.
4.3.6. Conduct a risk-benefit analysis for implementation of an innovative idea or simulated entrepreneurial activity.

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 altruism, integrity, trustworthiness, diligence, flexibility, patience, humility, and respect in all interactions.
4.4.2. Display preparation, initiative, and accountability consistent with a commitment to excellence.
4.4.3. Deliver patient-centered care in a manner that is legal, ethical, and compassionate and free of conflict of interest.
4.4.4. Demonstrate an awareness that one's professionalism is constantly evaluated by others.
4.4.5. Engage in the profession of pharmacy by demonstrating a commitment to its continual improvement.
4.4.6. Display respect for patient privacy, confidentiality, and autonomy.