

**FERRIS STATE UNIVERSITY**  
**COLLEGE OF PHARMACY**  
**APPROVED BY FACULTY AUGUST 20, 2014**

**1.0.0 DOMAIN 1 - FOUNDATIONAL KNOWLEDGE**

1.1.0 Learner (**Learner**) Apply knowledge from the foundational sciences (i.e., 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.

1.1.1 Apply the basic principles, mechanisms, and metabolic sequelae of human disease.

1.1.2 Apply the chemical basis of drug action, with an emphasis on the application of physico-chemical properties, structure-activity relationships, receptor binding, and metabolism to therapeutic decision-making.

1.1.3 Apply the mechanisms of therapeutic and adverse drug action and interaction, and application of these principles to therapeutic decision-making.

1.1.4 Apply the clinical laboratory data to disease state management, including screening, diagnosis, progression, and treatment evaluation.

1.1.5 Apply the mathematical skills required to accurately dose therapeutic drug regimens and determine dosage preparations (including extemporaneously compounded dosage forms) that are therapeutically sound and safe for patient use.

1.1.6 Describe the physico-chemical properties and formulation of drugs in various sterile and non-sterile dosage forms when selecting drug product for the patient.

1.1.7 Prepare sterile and non-sterile prescriptions that are pharmaceutically accurate regarding drug product and dose, free from contamination, and appropriately formulated for patient use.

1.1.8 Apply the federal and appropriate state-specific statutes that regulate the practice of pharmacy, along with relevant civil and contract law.

1.1.9 Apply the structure, function and properties of microorganisms (i.e. bacteria, viruses, parasites and fungi) responsible for human disease, and design rational approaches to their containment or eradication.

1.1.10 Apply knowledge in foundational sciences to solve therapeutic problems and advance patient-centered care.

1.1.11 Analyze the medical evidence related to prescription drugs, non-prescription drugs, and alternative therapies.

1.1.12 Analyze emerging theories, information, and technologies that may impact patient-centered and population based care.

**2.0.0 DOMAIN 2 - ESSENTIALS FOR PRACTICE AND CARE**

2.1.0 Patient-centered care (**Caregiver**) - Provide patient-centered care as the medication expert (e.g. collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities).

- 2.1.1 Collect subjective and objective evidence (including socioeconomic, cultural) related to patient, medications, allergies/adverse reactions, and disease.
- 2.1.2 Interpret relevant medical evidence and patient data.
- 2.1.3 Prioritize patient needs.
- 2.1.4 Formulate evidence-based care plans, and care transitions with consideration of the unique needs of the patient while emphasizing the need for patients to take responsibility for the control of their health.
- 2.1.5 Implement patient-centered care plans.
- 2.1.6 Monitor the patient and adjust care plan as needed.
- 2.1.7 Document patient care related activities.
- 2.1.8 Appropriately triage patients to the proper health care provider and assist them in navigating the healthcare system.
- 2.2.0 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 Competently perform in all areas of a typical medication use systems (i.e., procurement, storage, prescribing, transcription, dispensing, administration, monitoring, documentation, transitions of care and emergency preparedness).
  - 2.2.2 Utilize informatics to optimize the medication use system.
  - 2.2.3 Utilize human, financial, and physical resources to optimize the medication use system.
  - 2.2.4 Apply standards, guidelines, best practices, and established processes related to safe and effective medication use in different pharmacy practice settings.
  - 2.2.5 Utilize continuous quality improvement techniques in the medication use process.
- 2.3.0 Health and wellness (**Promoter**) - Design prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve health and wellness.
  - 2.3.1 Design systematic preventative care, using risk assessment, risk reduction, screening, education, and immunizations to improve health and wellness.
  - 2.3.2 Evaluate personal, social, economic, and environmental conditions to maximize health and wellness.
- 2.4.0 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 Assess the healthcare status and needs of a targeted patient population.
  - 2.4.2 Develop and provide an evidence-based approach to population health management that considers the cost, care, access, and satisfaction needs of a targeted patient population.
- 3.0.0 DOMAIN 3 - APPROACH TO PRACTICE AND CARE**
- 3.1.0 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 the relevant problems.
  - 3.1.2 Define goals and alternative goals.

- 3.1.3 Explore multiple solutions by organizing, prioritizing, and defending each possible solution.
- 3.1.4 Anticipate positive and negative outcomes by reviewing assumptions, inconsistencies, and unintended consequences.
- 3.1.5 Implement the most viable solution, including monitoring parameters, to measure intended and unintended consequences.
- 3.1.6 Reflect on the solution implemented and its effects to improve future performance.
- 3.2.0 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 or select the most effective techniques/strategies to achieve learning objectives.
  - 3.2.3 Demonstrate the ability to coordinate educational efforts with other healthcare providers, when appropriate, to ensure a consistent, comprehensive, and team-based encounter.
  - 3.2.4 Ensure instructional content contains the most current information relevant for the intended audience.
  - 3.2.5 Adapt instruction and deliver to the intended audience.
  - 3.2.6 Deliver and obtain feedback to assess learning and promote goal setting and goal attainment for the intended audience.
- 3.3.0 Inter-professional collaboration (**Collaborator**) - Actively participate and engage as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs.
  - 3.3.1 Establish a climate of shared values and mutual respect among healthcare team members to meet patient care needs.
  - 3.3.2 Define clear roles and responsibilities for healthcare team members to optimize outcomes for specific patient care encounters.
  - 3.3.3 Communicate in a manner that values team-based decision making and shows respect for contributions from other areas of expertise.
  - 3.3.4 Perform effectively as a member of an inter-professional functioning team (one that includes the patient, family, and community).
- 3.4.0 Cultural sensitivity (**Includer**) - Recognize social determinants of health to diminish disparities and inequities in access to quality care.
  - 3.4.1 Recognize the collective identity and norms of different cultures without overgeneralizing (i.e., recognize and avoid biases and stereotyping).
  - 3.4.2 Demonstrate an attitude that is respectful of different cultures.
  - 3.4.3 Assess a patient's health literacy and modify communication strategies to meet the patient's needs.
  - 3.4.4 Consider cultural issues in all aspects of practice to reduce health disparities.

- 3.5.0 Communication (**Communicator**) - Effectively communicate verbally and nonverbally when interacting with an individual, group or organization.
  - 3.5.1 Interview patients using an organized structure, specific questioning techniques (e.g., motivational interviewing), and medical terminology adapted for the audience.
  - 3.5.2 Actively listen and ask appropriate open and closed-ended questions to gather information.
  - 3.5.3 Use available technology and other media to effectively communicate and document.
  - 3.5.4 Use effective interpersonal skills to establish rapport and build trusting relationships.
  - 3.5.5 Communicate assertively, persuasively, confidently, and clearly in verbal, nonverbal and written form commensurate with professional practice setting.
  - 3.5.6 Demonstrate empathy when interacting with others.
- 4.0.0 DOMAIN 4 - PERSONAL AND PROFESSIONAL DEVELOPMENT**
- 4.1.0 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 Self-assess understanding and abilities and engage in help seeking behaviors and adapt learning strategies accordingly.
  - 4.1.2 Identify, create, implement, evaluate and modify plans for personal and professional development for the purpose of individual growth.
  - 4.1.3 Demonstrate engagement, confidence, self-direction, ownership, flexibility, and accountability in all learning and professional situations.
  - 4.1.4 Develop engagement in activities that promote professional citizenship.
  - 4.1.5 Identify constructive strategies to detect, and manage personal and professional stress that impact pharmacy practice and personal health.
- 4.2.0 Leadership (**Leader**) - Demonstrate responsibility for creating and achieving shared goals, regardless of position.
  - 4.2.1 Demonstrate the ability to lead a project, organization, team or event.
  - 4.2.2 Exhibit the ability to effectively communicate expectations, affect change, build consensus, appropriately utilize personnel and resources, and develop a shared set of goals.
  - 4.2.3 Effectively function in a team or group to achieve or enhance goals and objectives.
- 4.3.0 Innovation and Entrepreneurship (**Innovator**) - Engage in innovative activities by using creative thinking to envision better ways of accomplishing professional goals.
  - 4.3.1 Demonstrate creative design, decision making, and solutions when confronted with novel problems, challenges or unmet needs.
  - 4.3.2 Develop a plan for a pharmacy service which includes organization, risk assessment and mitigation and resource identification and feasibility.
- 4.4.0 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 compassion, empathy, altruism, integrity, trustworthiness, flexibility, and respect.
- 4.4.2 Deliver patient-centered care in a manner that is legal, ethical, and compassionate.

References:

Citation (pending): Medina MS, PlazaCM, Stowe CD, et.al. Center for the Advancement of Pharmacy Education (CAPE) Educational Outcomes. Am J Pharm Educ. 2013; in press.

Accreditation Council for Pharmacy Education. Accreditation Standards and Key Elements for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree (Draft Standards 2016). Released 2/3/2014.