Program Intended Learning Outcomes

1.1. Develop, integrate, and 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.
2.1. Patient-centered care - 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).
2.2. Medication use systems management- Manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems.
2.3. Health and wellness - Design prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve health and wellness.
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.
3.1. Problem Solving– Identify problems; explore and prioritize potential strategies; and design, implement, and evaluate a viable solution.
3.2. Educator– Educate all audiences by determining the most effective and enduring ways to impart information and assess understanding.
3.3. Patient Advocacy - Assure that patients' best interests are represented
3.4. Interprofessional collaboration – Actively participate and engage as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs.
3.5. Cultural sensitivity - Recognize social determinants of health to diminish disparities and inequities in access to quality care.
3.6. Communication – Effectively communicate verbally and nonverbally when interacting with an individual, group, or organization.
4.1. Self-awareness– Examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth
4.2. Leadership- Demonstrate responsibility for creating and achieving shared goals, regardless of position.
4.3. Innovation and Entrepreneurship- Engage in innovative activities by using creative thinking to envision better ways of accomplishing professional goals.
4.4. Professionalism - Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society.
5.1. Carries out compounding procedures to produce an effective and safe medicine (Compounder) and implements quality control measures and tests (Quality Manager).

competences	Learner	Caregiver	Manager	Promoter	Provider	Problem Solver	Educator	Advocate	Collaborator	Includer	Communicator	Self-aware	Leader	Innovator	Professional	Manufacturer
Course Tittle	**1.2**	**2.1**	**2.2**	**2.3**	**2.4**	**3.1**	**3.2**	**3.3**	**3.4**	**3.5**	**3.6**	**4.1**	**4.2**	**4.3**	**4.4**	**5.1**
Biology	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Pharmacy Practice 1 (Introduction to the Pharmacy Profession)	No	No	No	No	No	yes	yes	yes	yes	yes	yes	No	No	No	No	No
General chemistry for pharmacy	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
General Chemistry-Practical	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Biostatistics	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
pharmaceutical medical terminology	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Analytical Chemistry	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Pharmacy Practice 2 (Professional Skills in Pharmacy)	No	No	No	No	No	yes	yes	yes	yes	yes	yes	No	No	No	No	No
Anatomy and histology for pharmacy	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Pharmaceutical organic chemistry	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Pharmaceutical Organic Chemistry-Practical	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Physiology for pharmacy	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
physical pharmacy	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes
Pharmaceutical biochemistry	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Pharmaceutical Biochemistry – Practical	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Pharmaceutical instrumental analysis	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
– Analytical Chemistry and Pharmaceutical Instrumental Analysis Practical	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Pharmaceutical Microbiology	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Pharmaceutical Microbiology - Practical	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
pharmacology 1	No	yes	yes	yes	yes	No	No	No	No	No	No	No	No	No	No	No
Pathophysiology	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Pharmaceutics 1	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes
Medicinal Chemistry 1	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Pharmaceutics 2	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes
pharmaceutics 2- Practical	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes
Immunology and Vaccines	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Clinical Biochemistry	No	yes	yes	yes	yes	No	No	No	No	No	No	No	No	No	No	No
Pharmacology 2	No	yes	yes	yes	yes	No	No	No	No	No	No	No	No	No	No	No
phytochemistry	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
phytochemistry - practical	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Pharmacy Practice 3 (Pharmacological care of patients in community (pharmacies	No	No	No	No	No	yes	yes	yes	yes	yes	yes	No	No	No	No	No
Pharmacy Practice 4 (Toxicology and medication Safety)	No	No	No	No	No	yes	yes	yes	yes	yes	yes	No	No	No	No	No
Medicinal Chemistry 2	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Medicinal Chemistry 2 - Practical	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Pharmacology 3	No	yes	yes	yes	yes	No	No	No	No	No	No	No	No	No	No	No
pharmaceutical technology	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes
Pharmaceutical Technology - Practical	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes
Pharmaco-economics	No	No	No	No	No	yes	yes	yes	yes	yes	yes	No	No	No	No	No
cosmetics	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes

community pharmacy	No	No	No	No	No	No	No	No	No	No	No	yes	yes	yes	yes	No
Biopharmaceutics and pharmacokinetics	No	yes	yes	yes	yes	No	No	No	No	No	No	No	No	No	No	No
Biopharmaceutics and pharmacokinetics - practical	No	yes	yes	yes	yes	No	No	No	No	No	No	No	No	No	No	No
Therapeutics 1	No	yes	yes	yes	yes	No	No	No	No	No	No	No	No	No	No	No
Clinical Cases 1- Practical	No	No	No	No	No	yes	yes	yes	yes	yes	yes	No	No	No	No	No
Phytotherapy	No	yes	yes	yes	yes	No	No	No	No	No	No	No	No	No	No	No
Pharmaceutical management and marketing	No	No	No	No	No	yes	yes	yes	yes	yes	yes	No	No	No	No	No
Over-the-counter medicines and medical device	No	yes	yes	yes	yes	No	No	No	No	No	No	No	No	No	No	No
Public Health for Pharmacy	No	yes	yes	yes	yes	No	No	No	No	No	No	No	No	No	No	No
Medicinal Chemistry 3	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Microbiology and pharmaceutical biotechnology	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes
Microbiology and pharmaceutical biotechnology practical	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes
Industrial pharmacy	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes
Industrial Pharmacy - Practical	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes
Pharmaceutical Legislation and Ethics	No	No	No	No	No	yes	yes	yes	yes	yes	yes	No	No	No	No	No
Clinical Nutrition	No	yes	yes	yes	yes	No	No	No	No	No	No	No	No	No	No	No
Therapeutics 2	No	yes	yes	yes	yes	No	No	No	No	No	No	No	No	No	No	No
Clinical Cases 2- Practical	No	No	No	No	No	yes	yes	yes	yes	yes	yes	No	No	No	No	No
Pharmacy Field Training	No	No	No	No	No	No	No	No	No	No	No	yes	yes	yes	yes	No
Therapeutics 3	No	yes	yes	yes	yes	No	No	No	No	No	No	No	No	No	No	No
Clinical Cases 3- Practical	No	No	No	No	No	yes	yes	yes	yes	yes	yes	No	No	No	No	No
drug delivery systems	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes
Evidence-based medicine information and practice	No	No	No	No	No	yes	yes	yes	yes	yes	yes	No	No	No	No	No
Epidemiology	yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No