GENERAL OUTCOMES

Outcome 1. Critical Thinking
The student should be able to retrieve, comprehend, interpret, apply, analyze, synthesize, and evaluate information. The student should be able to use critical thinking skills to identify, manage, and prevent problems and make appropriate decisions. The student should understand the research process and be able to solve patient and community health problems.

Outcome 2. Development of Knowledge and Skills
The student should comprehend and demonstrate the ability to use the scientific method, and possess the requisite knowledge to demonstrate and utilize scientific knowledge in practice.

Outcome 3. Communication Skills (Oral and Written)
The student should be able to read, write, speak, listen and use multimedia to communicate and collaborate effectively with patients, caregivers, healthcare professionals and the community. The student should be able to counsel and educate patients, caregivers, healthcare professionals and the community about drug therapy and health issues. The student should be able to assess the understanding of oral and written communications and adjust the messages accordingly in order to assure the effectiveness of communication.

Outcome 4. Professional Responsibility and Ethics
The student should take responsibility for the outcomes of medication therapy and make rational and ethical decisions that represent the best interest of the patient and the community. The student should respect the patient, the community, and other health professionals, and the privacy and confidentiality of health information. The student should demonstrate sensitivity to cultural and societal diversity and be able to adapt care plans and practice to meet the needs of a diverse group of patients and patient populations. The student should carry out duties in accordance with legal, ethical, social, economic, and professional guidelines.

Outcome 5. Social Interaction, Citizenship, Leadership, Professionalism
The student should be able to collaborate with patients, caregivers, colleagues, health professionals and members of the community to prevent, identify, and resolve drug-related problems and promote individual and community health. The student should demonstrate a commitment to the profession through professional involvement, community activities, and leadership. The student should collaborate with colleagues, faculty, staff, patients, caregivers, other professionals, and the community with empathy and respect at all times.

Outcome 6. Life-Long Learning
The student should be a life-long learner who is able to recognize knowledge and skill deficits, formulate a learning plan, locate and interpret credible resources, and assess progress toward meeting learning goals. The student should be able to identify and analyze emerging issues, products, and services that may affect public health policy, individual and population-based therapeutic outcomes, medication use systems, and pharmacy benefits.
PRACTICE OUTCOMES

Outcome 1. Patient Assessment

The student should be able to create a patient database utilizing data obtained from the medical record and/or by direct patient assessment. In preparing the database, the student should be able to gather and interpret pertinent information from the medical record that includes data from the: 1) history and physical examination; 2) review of systems; 3) psychosocial, behavioral, cultural, and economic status; 4) laboratory and other diagnostics tests; 5) documented medication history; and 6) interdisciplinary progress notes. The student should be able to perform the following assessments: 1) a medication history; 2) review of systems; and 3) selected elements of a physical examination. The student should be able to interpret the data to create a prioritized drug-related problem list.

Outcome 2. Pharmaceutical Care Plan Development

The student should be able to collaborate with health professionals, caregivers, and the patient to formulate a pharmaceutical care plan that maximizes patient response to drug therapy by preventing or resolving drug-related problems in order to achieve a positive outcome. The pharmaceutical care plan should include therapeutic goals, educational information, and lifestyle changes that are intended to promote general health and prevent or minimize disease progression.

In creating the plan, the student should utilize the patient database and knowledge of the physiochemical, chemical, biopharmaceutical, pharmacokinetic, and pharmacodynamic characteristics of administered medications as well as behavioral, cultural and economic factors that might influence therapy. Recommendations for care should be evidence-based and supported by best practice literature or expert opinion. The student should be able to defend the care plan (verbally or in writing), establish a mechanism for follow-up, and document the impact and value of the services provided.

Outcome 3. Medication Therapy Management

The student should be able to evaluate the success of the pharmaceutical care plan and monitor the patient’s progress in meeting the goals of therapy. The student should be able to modify the plan utilizing knowledge of the physiochemical, chemical, biopharmaceutical, pharmacokinetic, and pharmacodynamic characteristics of administered medications as well as physiological, behavioral, cultural and economic factors that might influence therapy.

Outcome 4. Pharmacodynamic Decision Making

The student should be able to make pharmacotherapy decisions for individual patients or defined patient populations and support those decisions based on knowledge of biomedical, pharmaceutical, administrative, and clinical sciences. Recommendations for care should be evidence-based, supported by best practice literature or expert opinion. The student should be able to recommend patient use of appropriate prescription and non-prescription medications, alternative and complementary therapies and non-drug therapies.

Outcome 5. Pharmaceutical Product Preparation, Dispensing and Administering

The student should be able to compound and/or dispense medications consistent with patient needs and in compliance with local policy, state and federal laws, and the recommendations of regulatory agencies. The student should demonstrate the ability to accurately interpret prescriptions, select appropriate dosage forms, and routes and methods of administration. The student should use appropriate calculations and techniques to prepare, compound, package, label, and dispense prescriptions to assure product quality. The student should demonstrate the ability to administer medications when appropriate.
Outcome 6. Management

The student should demonstrate the ability to set personal and professional goals and priorities, effectively plan and manage time, and organize work. The student should demonstrate the ability to contribute as a productive member of a work team and assume a leadership position as appropriate.

The student should be able to work collaboratively with patients, caregivers, prescribers, administrative and supportive personnel, and other health care professionals to manage and use the human, physical, medical, informational, and technological resources of the health care system, including pharmacy systems, to promote health and wellbeing and to optimize the therapeutic outcome of medication use.

Outcome 7. Public Health

The student should be able to: 1) interpret population-specific data to assess the health needs of a community or population; 2) develop and participate in wellness and disease prevention initiatives to improve health; 3) promote disease prevention and management across a continuum of care; and 4) contribute to the development of rational health policy.

The student should be able to work with patients, communities, at-risk populations, and other members of the interprofessional health care team to prepare and participate in initiatives to identify and resolve public health problems.