Mercer University
College of Pharmacy
Doctor of Pharmacy Curriculum Outcomes

Vision for Curricular Development

The College of Pharmacy of Mercer University seeks to prepare its professional and postgraduate students to effectively contribute to and improve health care through excellence in patient- centered care and research. To achieve this mission the College provides an education that is effective, innovative and comprehensive; fosters an environment that is caring and responsive toward all constituents; ensures the quality of programs through continuous evaluation and improvement; encourages diversity and adheres to the values of the University's Judeo-Christian heritage while respecting the pluralistic values of our society; provides an environment where students participate in active learning and develop critical thinking and problem solving skills; fosters personal and professional growth and a commitment to lifelong learning; supports a highly qualified faculty in their pursuit of teaching, scholarly activity, and service in recognition that these activities are integral components of continuing professional growth; conducts basic and applied research, emphasizing scientific advancement, educational methods, and improving healthcare outcomes; prepares graduates to assume leadership roles in their communities and profession; provides postgraduate education including graduate programs, residencies, fellowships, and certificates in focus areas; and participates with other stakeholders in the development of new and improved practice models.

The College of Pharmacy of Mercer University shares in the mission of the profession of pharmacy and is responsible for that portion of the mission relating to education, research, patient care, patient safety, and service. The Doctor of Pharmacy curriculum at Mercer University College of Pharmacy is designed to educate patient-centered pharmacists who can effectively optimize medication therapy outcomes. In the Doctor of Pharmacy curriculum the desired results or *outcomes* from the instructional processes have been defined. A curriculum outcome is a statement that defines the expected performance of a student upon completion of the program. An outcome should be measurable and the College uses a variety of assessment instruments to determine if these educational outcomes are being achieved. Through an ongoing process, these assessment measures provide data that allows for continuous quality improvement of the program.

Outcome statements can be used by the faculty to evaluate the success of the curriculum and the learning environment. Students should, if the program is successful, be able to perform the stated outcomes by the time they graduate. The outcome statements should be used by students to help them understand what the faculty expects them to achieve during the professional program.

The curriculum outcomes presented here are based on the mission of the College. As a framework for the outcomes, the Educational Outcomes developed by the American Association of Colleges of Pharmacy Center for the Advancement of Pharmaceutical Education Advisory Panel were used. The outcomes integrate basic biomedical sciences, pharmaceutical sciences, social and behavioral sciences, administrative sciences, and clinical sciences as well as professional attributes, interprofessional practice, and professionalism across the major headings of **Patient Care**, **Systems Management**, and **Public Health**, as they are in the practice of pharmacy.

Each outcome is supported by a series of competencies that are described in behavioral terminology. Additionally, the statements are provided as a set of expectations at three levels of progression through the curriculum; foundational, transitional, and advanced. The levels do not necessarily correlate with a particular professional year within the curriculum. For example, a student may have achieved some of the foundational level outcomes from pre-pharmacy work. Each level builds successively on the previous level. Levels are provided to assist the faculty in course development and to ensure that a student is not being asked to perform at a level for which they are not prepared. Likewise, a course should not be created in which the student is overqualified for the course learning objectives, i.e., the student is "under- challenged" and there are few opportunities to develop progressively toward the final outcome. Faculty, in concert with the Curriculum Committee, are responsible for the design and implementation of measurable learning objectives for individual courses.

These outcome statements enable faculty, students, and others to evaluate the curriculum as well as to describe desired outcomes to all interested parties. A primary goal of the statements is to evolve increased student accountability and control of the learning process.

Curriculum Outcomes

I. **PATIENT CARE** Provide patient care in cooperation with patients, prescribers, and other members of an interprofessional health care team based upon sound therapeutic principles and evidence-based data, taking into account relevant legal, ethical, social, economic, and professional issues, emerging technologies, and evolving biomedical, socio-behavioral, and clinical sciences that may impact therapeutic outcomes.

A. Provide patient-centered care.

1. Design, implement, monitor, evaluate, and adjust patient care plans that are patient-specific and evidence-based.

   a. **Analyzing information and making decisions**

   Foundational:
   - Obtain, interpret, evaluate, and organize information relevant to the problem with the aid of technologies.
   - Identify assumptions, biases, and prejudices relevant to the issue.

   Transitional:
   - Employ more sophisticated methods for discovery, analysis, and information searching and processing.
   - Develop interdisciplinary approaches to problem analysis.
   - Test assumptions, biases, and prejudices relevant to the issue.
   - Identify realistic outcomes.
   - Construct criteria for evaluation of chosen solutions.
   - Provide support for arguments, solutions and results.

   Advanced:
   - Consider and prioritize problems and solutions within appropriate social, scientific, cultural, intellectual and ethical context.
   - Articulate specific criteria for determining success or failure of solutions.
   - Display openness to new ideas and a tolerance for ambiguity and incompleteness of data in solving problems.
   - Modify solutions when monitoring indicates a need.
   - Synthesize information and create a solution, hypothesize, draw conclusions, present alternatives or decide on a course of action.
   - Evaluate the conclusion according to identified criteria.
   - Articulate support for arguments, solutions, and results.

   b. **Evaluating a prescription and medication order**

   Foundational:
   - Assess prescription or medication order for completeness, accuracy, authenticity, legality and reimbursement eligibility.
   - Use an organized record system to access and update patient information.
   - Determine the completeness of information in the patient database.
   - Identify appropriate references in all practice settings to assess the safe and accurate dispensing of all therapeutic agents.

   Transitional:
   - Assess the bioavailability of drugs for safe generic substitution.
   - Determine the accuracy of a prescription or medication order based on drug-related factors such as dose, dosage form, quantity, route and frequency of administration.
   - Determine a safe dosage range for prescription drugs, non-prescription drugs, and dietary supplements based upon knowledge of medical indications.

- Assess changes on the dose of the prescribed drug based upon knowledge of age-related physiological changes.
- Determine the accuracy of an individual drug for a specific patient.
- Identify prescription and medication prescribing errors for potential drug-related problems.

Advanced:
- Use an organized record system to prospectively analyze patient information.
- Determine the accuracy of a prescription or medication order based on patient history and the presenting medical diagnosis as well as patient-dependent factors such as age, sex, race, current and past medical, laboratory and allergy history and a prospective review of all prescriptions and non-prescriptions in the individual patient's drug profile.
- Assess prescriptions and medication orders and recommend efficacious therapeutic alternatives.
- Assess refill prescriptions or medication orders for medication administration errors and non-compliance by the patient and develop strategies where necessary to achieve desired therapeutic outcomes.

c. **Achieving cultural competence and social awareness**

Foundational:
- Recognize differences in ideas, beliefs, aesthetics and values found in various historical periods and societies including how they evolved.
- Describe the major ideas, beliefs, aesthetics and values associated with various subcultures within one's own contemporary society.
- Describe one's social, cultural, historic, economic, and political background.
- Describe the major institutions and processes of government and the economic systems.

Transitional:
- Explain how differences in approaches to social, cultural, economic, political and scientific issues among people can affect everyday behavior.
- Describe the impact of historic social, cultural, economic, political and scientific events on contemporary pharmacy practice.

Advanced:
- Render high quality pharmacist-provided patient care that takes into account relevant differences in cultural, social, economic, political, and scientific viewpoints between the provider and the patient.
- Advocate improved professional approaches to meet the pharmacy-related needs of individual patients based upon critical analysis of the social, cultural, historical, economic and political significance of the pharmacy profession's societal contributions.

d. **Determining appropriate therapeutic courses of action by identifying, preventing, and/or resolving medication-related problems**

Foundational:
- Describe normal anatomy, physiology, and the pathophysiology of disease.
- Describe the chemical, biochemical, immunological and pharmacological mechanisms of drug action.
- Collect and organize patient data into a format that facilitates making decisions to meet the patient's health care needs.
- Use appropriate interviewing skills.
- Recommend appropriate non-pharmacological treatments to meet the self-care needs of the patient.

Transitional:
- Describe the various pharmacologic approaches to treatment of selected disease states and application to the pathophysiology of disease.
- Relate the chemical and/or biochemical structure of drugs to their therapeutic action.
- Initiate and adjust doses in an individual patient based upon knowledge of pharmacokinetic principles.
- Determine individual patient needs for dietary, enteral and parenteral nutrition.
- Interpret and analyze patient, disease, and drug data to determine desired therapeutic outcomes for a patient.
- Identify and resolve financial barriers to obtaining medication which can adversely impact desired therapeutic outcomes.
- Formulate a cost effective pharmacotherapeutic regimen to achieve desired therapeutic outcomes.
- Design a plan to implement a pharmacotherapeutic regimen that meets the health care needs related to the patient's presenting problem.
- Design a plan to monitor a pharmacotherapeutic regimen.
- Assess the impact of implementing a pharmacotherapeutic regimen on achieving desired therapeutic outcomes and improving the patient quality of life.
- Select information from the patient record or profile that the pharmacist may need to make decisions on determining a patient's health care needs.
- Obtain necessary additional information from a health care professional to address a patient's health care needs.
- Assess pertinent patient data to determine a patient's health care needs related to the presenting problem.
- Record information related to identification, resolution or prevention of medication-related problems in individual patients.
- Develop and conduct health screening, promotion and prevention programs.
- Use appropriate patient assessment skills to evaluate a patient's health status.

Advanced:
- Assume personal responsibility for patients and continuously assess the effectiveness of their therapeutic plan in achieving desired outcomes.
- Recommend adjustments of medication doses and dosage regimens based upon pharmacodynamic, pharmacokinetic and physiological parameters specific for the patient.
- Resolve adverse drug reactions, including drug allergies, and drug interactions, and assess their impact on desired therapeutic outcomes.
- Develop and recommend appropriate revisions to therapeutic plans when desired therapeutic outcomes are not being achieved.
- Devise a methodology for documenting recommendations based on professional and practical considerations.

2. Communicate and collaborate with prescribers, patients, care givers, and other involved health care providers to engender a team approach to patient care.

   a. Demonstrating effective communication skills and using informatics

   Foundational:
   - Effectively use interpersonal communication skills.
   - Demonstrate professionalism in personal conduct and appearance.
   - Effectively present ideas in writing.
   - Demonstrate effective basic counseling skills.
   - Identify barriers to communication and devise and implement strategies to overcome these barriers.
   - Demonstrate active listening skills.
   - Demonstrate assertiveness in making recommendations.
   - Identify one's strengths and weaknesses in communications and devise and implement strategies to improve skills.

- Use informatics to support communication.
- Demonstrate effective medication history interviewing skills.

Transitional:
- Effectively present group presentations using appropriate media aids to patients, care givers, peers, and other health care professionals.
- Effectively communicate in writing information necessary to promote patient care to diverse audiences.

Advanced:
- Demonstrate effective patient counseling to patients and care givers in order to improve therapeutic outcomes in different situations using different methodologies.
- Identify barriers to communications when communicating to patients, care givers, peers, and other health care professionals and develop and implement strategies to overcome these barriers in a variety of health care situations.
- Demonstrate active listening skills in patient care situations.
- Identify one's strengths and weaknesses in communicating to different audiences in patient care situations and develop and implement strategies to improve these skills.
- Use informatics to effectively communicate to patients, care givers, peers, and health care professionals in patient care situations.

b. Collaborating effectively

Foundational:
- Identify the job descriptions/roles of the members of an interprofessional health care team.
- Learn the perspective of other health care providers.
- Identify issues that are important to the patient regarding their health care.
- Learn effective teamwork skills.

Transitional:
- Practice assertiveness in communication when making recommendations to health care providers regarding therapy.
- Collaborate with health care team to identify patient care issues.
- Collaborate with the patient to self-monitor the selected drug regimen.
- Practice effective interprofessional communication skills to obtain information that may be needed to make decisions on meeting the patient's health care needs.
- Organize information for verbal, written, or electronic communication to patients, consumers or health care professionals.

Advanced:
- Apply assertiveness in communication when making recommendations to health care providers regarding therapy.
- Determine when other health professionals are most appropriate for managing patients' health care needs.
- Collaborate with the patient and other health care professionals in the drug use decision-making process.
- Effectively convey verbal or written information to patients, consumers or health care professionals.
- Design and utilize effective strategies to influence the health care behavior of patients toward preventive care.
- Prepare and deliver effective health education information.
- Effectively collaborate with patients about their medications and dietary supplements to ensure safe and effective use and compliance.
- Effectively collaborate with patients on the use of home diagnostic tests and self-monitoring devices to assist patients in detecting or monitoring health conditions.
- Work with other health care providers to implement, monitor, and change a pharmacotherapeutic plan to meet the patient's health care needs.

3. Retrieve, analyze, and interpret the professional, lay, and scientific literature to provide drug information to patients, their families, and other involved health care providers.

Foundational:
- Describe the types of data required by the pharmacist in order to clarify a drug information request.
- Describe the various types of drug information resources that can be used to satisfy a specific drug information request.
- Use a systematic and efficient procedure to retrieve appropriate drug information to satisfy a drug information request.
- Differentiate appropriate situations in which to use lay versus professional web-based resources.

Transitional:
- Discriminate between the requestor's statement of perceived need and actual need in order to clarify a drug information request.
- Examine research literature for appropriateness, accuracy, and completeness.
- Apply principles of research design and biostatistics to evaluate the professional, scientific, and lay literature.

Advanced:
- Integrate selected drug information to form conclusions or recommendations in answering a drug information request.
- Formulate a drug information response that is based on the requester's level of understanding.
- Document responses to drug information requests using a procedure that will record the provision of pharmacist-provided patient care.
- Critically evaluate and communicate the professional, scientific, and lay literature.

4. Carry out duties in accordance with legal, ethical, social, economic, and professional guidelines.

   a. Taking into consideration personal values, ethical principles, and caring

Foundational:
- Identify and describe how values impact upon personal behavior and the provision of pharmacist-provided patient care.
- Identify values which impact upon the behavior of others involved in the patient care process (patients, allied health care providers, administrators, payors, etc.)
- Predict how values impact the behavior of others involved in the patient care process.
- Uphold the duties and responsibilities of the pharmacist as stated in the Oath of Professionalism.
- Identify the characteristics of caring behavior.
- Uphold the College's Code of Professional Conduct and Honor Code.

Transitional:
- Describe the major ethical theories that impact on the provision of health care.
- Describe the key ethical principles that impact on the provision of health care (e.g., autonomy, beneficence, nonmaleficence, justice).
- Describe how the decision-making process can be integrated with ethical theories and principles to resolve ethical health care dilemmas.
- Relate personal values to the process of ethical health care decisions.
- Relate professional values to the process of ethical decision-making in relation to the provision of pharmacist-provided patient care.
- Describe the professional behavior necessary to demonstrate a caring attitude.

Advanced:
- Employ major ethical theories and principles and a systematic decision-making process to resolve ethical patient care dilemmas in personal, societal, and professional context.
- Analyze the ethical principles, theories and decision-making processes employed by others to resolve a given ethical health care problem.
- Evaluate the ethical accountability of an action, intention or outcome relative to a given ethical health care problem.
- Demonstrate a caring attitude in the provision of pharmacist-provided patient care services to patients.
- Demonstrate behavior that fulfills the responsibilities and duties owed to the patient in the provision of pharmacist-provided patient care.
- Integrate ethical principles into one's professional conduct.

b. Applying legal and regulatory requirements

Foundational:
- Identify resources that help maintain the pharmacist's current awareness of regulatory requirements affecting the practice of pharmacy.
- Explain federal and state laws and regulations pertaining to the practice of pharmacy.
- Know legal requirements for dispensing, counseling and filing individual prescriptions and scheduled drug inventory records.

Transitional:
- Observe legal principles and regulatory requirements in the practice of pharmacy.

Advanced:
- Develop a plan for keeping current with changes in laws and regulations pertaining to the practice of pharmacy.

c. Preparing and administering prescriptions or medication orders

Foundational:
- Prepare proper labeling and select packaging for a drug product.
- Use pharmaceutics to assess physical and chemical compatibility of drug delivery systems for safe preparation and administration.
- Use organized record systems to store patient data, receive or transmit prescriptions, store and access patient information and maintain drug dispensing, labeling and inventory records for all medications.

Transitional:
- Prepare, compound and dispense drug products.
- Develop skills for administration of select drug products including injectables.
- Select or recommend the appropriate drug delivery system.
- Use mathematical competencies and technical skills necessary for the preparation of drug products.
- Demonstrate proper aseptic technique.
- Demonstrate techniques for safe handling of pharmaceuticals and biohazardous materials.

Advanced:
- Assure an operational check and balance system to minimize drug-dispensing errors and maximize patient safety.
- Use proper procedures and aseptic technique for assuring safe handling of potentially cytotoxic drugs.

5. Maintain professional competence by identifying and analyzing emerging issues, products, and services that may impact patient-specific therapeutic outcomes (continuous professional development).

Foundational:
- Articulate personal approach to learning including time management strategies, optimal locations for study and utilization of available instructional resources.
- Identify strengths and weaknesses within personal approach to learning.
- Formulate strategies to address identified weaknesses in personal approach to learning.
- Describe the relationship of instructional strategies and assessment processes within individual courses to stated learning objectives.
- Use learning objectives to guide learning efforts including the selection and use of instructional resources to facilitate learning.
- Identify the characteristics of the spirit of inquiry, critical analysis and logical thinking.
- Understand the obligation to participate in inquiry and professional improvement.
- Describe postgraduate opportunities for ongoing personal and professional learning.
- Explain the necessity of lifelong learning to maintain professional competence and personal growth.

Transitional:
- Interpret assessment feedback from others to identify performance strengths and areas in need of refinement or mediation.
- Self-assess the effectiveness of learning performance.
- Formulate strategies to address performance areas in need of refinement or remediation.
- Initiate action to correct identified learning deficiencies.
- Formulate a strategy to assess abilities in critical analysis and logical thinking.
- Formulate a strategy to participate in inquiry for professional improvement.

Advanced:
- Regularly self-assess learning needs for ongoing personal and professional growth.
- Engage in learning activities on a regular, ongoing basis for personal and professional development.
- Regularly engage in inquiry, critical analysis, and logical thinking in personal and professional activities.

B. Provide population-based care.

1. Develop and implement population-specific, evidence-based disease management programs and protocols based upon analysis of epidemiologic and pharmacoeconomic data, medication use criteria, medication use review, and risk reduction strategies.

   a. **Analyzing information and making decisions**

   Foundational:
   - Obtain, interpret, evaluate, and organize information relevant to the problem with the aid of technologies.
   - Identify assumptions, biases, and prejudices relevant to the issue.

   Transitional:
   - Employ more sophisticated methods for discovery, analysis, and information searching and processing.
   - Develop interdisciplinary approaches to problem analysis.
   - Test assumptions, biases, and prejudices relevant to the issue.
   - Identify realistic outcomes.
   - Construct criteria for evaluation of chosen solutions.
   - Provide support for arguments, solutions and results.

Advanced:
- Evaluate the conclusion to an issue according to identified criteria.
- Situate problems and solutions within appropriate social, scientific, cultural, intellectual and ethical context.
- Articulate specific criteria for determining success or failure of solutions.
- Display openness to new ideas and a tolerance for ambiguity and incompleteness of data in solving problems.
- Modify solutions when monitoring indicates a need.
- Prioritize problems based on identifiable criteria or standards.
- Synthesize information and create a solution, hypothesize, draw conclusions, present alternatives or decide on a course of action.
- Articulate support for arguments, solutions, and results.

b. **Evaluating and managing human, economic, scientific, and technological resources**

Foundational:
- Use health care system information to project future economic and manpower needs for pharmacy practice.
- Identify human, economic, scientific, and informatic resources that maximize pharmacist-provided patient care.

Transitional:
- Use concepts of drug use evaluation to develop effective guidelines for a drug use evaluation program.
- Manage human, economic, scientific, and informatic resources that maximize pharmacist-provided patient care.
- Outline procedures for effective management of a drug formulary.

Advanced:
- Apply pharmacy management principles in the practice of pharmacy.
- Formulate a strategy to integrate new resources into the practice setting to achieve desired goals.
- Use pharmacoenomic principles in practice to achieve desired goals.
- Demonstrate the ability to practice pharmacy within a managed care environment.

c. **Achieving cultural competence and social awareness**

Foundational:
- Recognize differences in ideas, beliefs, aesthetics and values found in various historical periods and societies including how they evolved.
- Describe the major ideas, beliefs, aesthetics and values associated with various subcultures within one's own contemporary society.
- Describe one's social, cultural, historic, economic, and political background.
- Describe the major institutions and processes of government and the economic systems.

Transitional:
- Explain how differences in approaches to social, cultural, economic, political and scientific issues among people can affect everyday behavior.
- Describe the impact of historic social, cultural, economic, political and scientific events on contemporary pharmacy practice.

Advanced:
- Render high quality pharmacist-provided patient care that takes into account relevant differences in cultural, social, economic, political, and scientific viewpoints between the provider and the patient.

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- Advocate improved professional approaches to meet the pharmacy-related needs of individual patients based upon critical analysis of the social, cultural, historical, economic and political significance of the pharmacy profession's societal contributions.

2. Communicate and collaborate with prescribers, population members, care givers, and other involved health care providers to engender a team approach to patient care.

a. Demonstrating effective communication skills and using informatics

Foundational:
- Effectively communicate with groups.
- Effectively present ideas in writing.
- Identify barriers to communication and devise and implement strategies to overcome these barriers.
- Demonstrate active listening skills.
- Demonstrate assertiveness in making recommendations.
- Identify one's strengths and weaknesses in communications and devise and implement strategies to improve skills.
- Use informatics to support communications.

Transitional:
- Effectively present group presentations using appropriate media aids to patients, care givers, peers, and other health care professionals.
- Effectively communicate in writing information necessary to promote patient care to diverse audiences.

Advanced:
- Identify barriers to communications when communicating to patients, care givers, peers, and other health care professionals and develop and implement strategies to overcome these barriers in a variety of health care situations.
- Demonstrate active listening skills in patient care situations.
- Apply assertiveness in communication when making recommendations to health care providers regarding therapy.
- Identify one's strengths and weaknesses in communicating to different audiences in patient care situations and develop and implement strategies to improve these skills.
- Use informatics to effectively communicate to patients, care givers, peers, and allied health care professionals in patient care situations.

b. Collaborating effectively

Foundational:
- Identify the job descriptions/roles of the members of an interprofessional health care team.
- Learn the perspective of other health care providers.
- Learn effective teamwork skills.

Transitional:
- Practice assertiveness in communication when making recommendations to health care providers regarding therapy.
- Collaborate with health care team to identify patient care issues.
- Practice effective interprofessional communication skills to obtain information that may be needed to make decisions on meeting patients health care needs.
- Organize information for verbal, written, or electronic communication to patients, consumers or health care professionals.

Advanced:
- Apply assertiveness in communication when making recommendations to health care providers regarding therapy.
- Determine when other health professionals are most appropriate for managing patients' health care needs.
- Collaborate with the patient and other health care professionals in the drug use decision-making process.
- Effectively convey verbal or written information to patients, consumers or health care professionals.
- Design and utilize effective strategies to influence the health care behavior of patients toward preventive care.
- Prepare and deliver effective health education information.
- Work with other health care providers to implement, monitor, and change a pharmacotherapeutic plan to meet the patient's health care needs.

3. Retrieve, analyze, and interpret the professional, lay, and scientific literature to provide drug information to other health care providers and to the public.

Foundational:
- Describe the types of data required by the pharmacist in order to clarify a drug information request.
- Describe the various types of drug information resources that can be used to satisfy a specific drug information request.
- Use a systematic and efficient procedure to retrieve appropriate drug information to satisfy a drug information request.
- Differentiate appropriate situations in which to use lay versus professional web-based resources.

Transitional:
- Discriminate between the requestor's statement of perceived need and actual need in order to clarify a drug information request.
- Examine research literature for appropriateness, accuracy, and completeness.
- Identify inaccuracies or bias in the professional, scientific, and lay literature.

Advanced:
- Integrate selected drug information to form conclusions or recommendations in answering a drug information request.
- Formulate a drug information response that is based on the requester's level of understanding.
- Document responses to drug information requests using a procedure that will record the provision of patient care.

4. Carry out duties in accordance with legal, ethical, social, economic, and professional guidelines.

    a. Taking into consideration personal values, ethical principles, and caring

Foundational:
- Identify and describe how values impact upon personal behavior and the provision of pharmacist-provided patient care.
- Identify values which impact upon the behavior of others involved in the patient care process (patients, allied health care providers, administrators, payors, etc.)
- Predict how values impact the behavior of others involved in the patient care process.
- Uphold the duties and responsibilities of the pharmacist as stated in the Oath of Professionalism.
- Identify the characteristics of caring behavior.
- Uphold the College's Code of Professional Conduct and Honor Code.

Transitional:
- Describe the major ethical theories that impact on the provision of health care.
- Describe the key ethical principles that impact on the provision of health care (e.g., autonomy, beneficence, nonmaleficence, justice).
- Describe how the decision-making process can be integrated with ethical theories and principles to resolve ethical health care dilemmas.
- Relate personal values to the process of ethical health care decisions.
- Relate professional values to the process of ethical decision-making in relation to the provision of pharmacist-provided patient care.
- Describe the professional behavior necessary to demonstrate a caring attitude.

Advanced:
- Employ major ethical theories and principles and a systematic decision-making process to resolve ethical patient care dilemmas in personal, societal, and professional context.
- Analyze the ethical principles, theories and decision-making processes employed by others to resolve a given ethical health care problem.
- Evaluate the ethical accountability of an action, intention or outcome relative to a given ethical health care problem.
- Demonstrate a caring attitude in the provision of pharmacist-provided patient care services to patients.
- Demonstrate behavior that fulfills the responsibilities and duties owed to the patient in the provision of pharmacist-provided patient care.
- Integrate ethical principles into one's professional conduct.

b. Applying legal and regulatory requirements

Foundational:
- Identify resources that help maintain the pharmacist's current awareness of regulatory requirements affecting the practice of pharmacy.
- Explain federal and state laws and regulations pertaining to the practice of pharmacy.

Transitional:
- Observe legal principles and regulatory requirements in the practice of pharmacy.

Advanced:
- Develop a plan for keeping current with changes in laws and regulations pertaining to the practice of pharmacy.

5. Maintain professional competence by identifying and analyzing emerging issues, products, and services that may impact population-based, therapeutic outcomes. (continuous professional development)

Foundational:
- Articulate personal approach to learning including time management strategies, optimal locations for study and utilization of available instructional resources.
- Identify strengths and weaknesses within personal approach to learning.
- Formulate strategies to address identified weaknesses in personal approach to learning.
- Describe the relationship of instructional strategies and assessment processes within individual courses to stated learning objectives.
- Use learning objectives to guide learning efforts including the selection and use of instructional resources to facilitate learning.
- Identify the characteristics of the spirit of inquiry, critical analysis and logical thinking.
- Understand the obligation to participate in inquiry and professional improvement.
- Describe postgraduate opportunities for ongoing personal and professional learning.
- Explain the necessity of lifelong learning to maintain professional competence and personal growth.

Transitional:
- Interpret assessment feedback from others to identify performance strengths and areas in need of refinement or mediation.
- Self-assess the effectiveness of learning performance.
- Formulate strategies to address performance areas in need of refinement or remediation.
- Initiate action to correct identified learning deficiencies.
- Formulate a strategy to assess abilities in critical analysis and logical thinking.
- Formulate a strategy to participate in inquiry for professional improvement.

Advanced:
- Regularly self-assess learning needs for ongoing personal and professional growth.
- Engage in learning activities on a regular, ongoing basis for personal and professional development.
- Regularly engage in inquiry, critical analysis, and logical thinking in personal and professional activities.

II. **SYSTEMS MANAGEMENT** Manage and use resources of the health care system, in cooperation with patients, prescribers, other health care providers, and administrative and supportive personnel, to promote health; to provide, assess, and coordinate safe, accurate, and time-sensitive medication distribution; and to improve therapeutic outcomes of medication use.

A. Manage human, physical, medical, informational, and technological resources.

1. Apply relevant legal, ethical, social, economic, and professional principles/issues to assure efficient, cost-effective utilization of human, physical, medical, informational, and technological resources in the provision of patient care.

   Foundational:
   - Recognize differences in ideas, beliefs, and values found in various societies.
   - Describe the major ideas, beliefs, and values associated with various subcultures within one's own contemporary society.
   - Describe one's social, cultural, historic, economic, and political background.
   - Describe the major institutions and processes of government and the economic system in which they are practiced.

   Transitional:
   - Explain how differences in approaches to social, cultural, economic, political and scientific issues among people can affect everyday behavior.
   - Explain how differences in approach to social, cultural, economic, political, and scientific issues among people can affect the delivery and acceptance of health care.
   - Describe the impact of historic social, cultural, economic, political and scientific events on contemporary pharmacy practice.
   - Evaluate the role of economics and how it impacts pharmacist-provided patient care.

   Advanced:
   - Deliver high quality pharmacist-provided patient care that takes into account relevant differences in cultural, social, economic, political, and scientific viewpoints between the provider and the patient.
   - Advocate improved professional approaches to meet the pharmacy-related needs of society and individual patients based upon critical analysis of the social, cultural, historical, economic and political significance of the pharmacy profession's societal contributions.
   - Recommend the most cost effective pharmacotherapy regimen based on patient and population specific parameters.

2. Communicate and collaborate with patients, prescribers, other health care providers, and administrative and supportive personnel to engender a team approach to assure efficient, cost-effective utilization of human, physical, medical, informational, and technological resources in the provision of patient care.

a. Collaborating effectively

Foundational:
- Identify the job descriptions/roles of the members of an interprofessional health care team.
- Learn the perspective of other health care providers.
- Identify issues that are important to the patient regarding their health care.
- Learn effective teamwork skills.

Transitional:
- Practice assertiveness in communication when making recommendations to health care providers regarding therapy.
- Collaborate with health care team to identify patient care issues.
- Collaborate with the patient to self-monitor the selected drug regimen.
- Practice effective interprofessional communication skills to obtain information that may be needed to make decisions on meeting the patient's health care needs.
- Provide economic information to the health-care team regarding health care options.

Advanced:
- Apply assertiveness in communication when making recommendations to health care providers regarding therapy.
- Collaborate with the patient and other health care professionals in the drug use decision-making process.
- Effectively convey verbal or written information to patients, consumers or health care professionals.
- Design and utilize effective strategies to influence the health care behavior of patients toward preventive care.
- Prepare and deliver effective health education information.
- Work with other health care providers to implement, monitor, and change a pharmacotherapeutic plan to meet the patient's health care needs.

b. Evaluating and managing human, economic, scientific, and technological resources

Foundational:
- Use health care system information to project future economic and manpower needs for pharmacy practice.
- Identify human, economic, scientific, and informatic resources that maximize pharmacist-provided patient care.

Transitional:
- Use concepts of drug use evaluation to develop effective guidelines for a drug use evaluation program.
- Manage human, economic, scientific, and informatic resources that maximize pharmacist-provided patient care.
- Outline procedures for effective management of a drug formulary.

Advanced:
- Apply pharmacy management principles in the practice of pharmacy.
- Formulate a strategy to integrate new resources into the practice setting to achieve desired goals.
- Use pharmacoenomic principles in practice to achieve desired goals.
- Demonstrate the ability to practice pharmacy within a managed care environment.

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3. Carry out duties in accordance with legal, ethical, social, economic, and professional guidelines.

      Foundational:
- Identify resources that help maintain the pharmacist's current awareness of regulatory requirements affecting the practice of pharmacy.
- Explain federal and state of Georgia laws and regulations pertaining to the practice of pharmacy.
- Explain consequences of failure to comply with regulatory requirements.

      Transitional:
- Observe legal principles and regulatory requirements in the practice of pharmacy.
- Develop a plan for keeping current with changes in laws and regulations pertaining to the practice of pharmacy.
- Outline procedures for effective management of a drug formulary.

      Advanced:
- Integrate ethical principles and adhere to legal and regulatory requirements.
- Use pharmacoenomic principles in practice to achieve desired goals.
- Take into consideration social and religious guidelines in determining therapeutic options.

4. Maintain professional competence by identifying and analyzing emerging issues, products, and services that may impact management of human, physical, medical, informational, and technological resources in the provision of patient care. (continuous professional development)

      Foundational:
- Articulate personal approach to learning including time management strategies, optimal locations for study and utilization of available instructional resources.
- Identify strengths and weaknesses within personal approach to learning.
- Formulate strategies to address identified weaknesses in personal approach to learning.
- Describe the relationship of instructional strategies and assessment processes within individual courses to stated learning objectives.
- Use learning objectives to guide learning efforts including the selection and use of instructional resources to facilitate learning.
- Identify the characteristics of the spirit of inquiry, critical analysis and logical thinking.
- Understand the obligation to participate in inquiry and professional improvement.
- Describe postgraduate opportunities for ongoing personal and professional learning.
- Explain the necessity of lifelong learning to maintain professional competence and personal growth.
- Use health care system information to project future economic and manpower needs for pharmacy practice.
- Use a systematic problem-solving process to make decisions about managing human, economic, scientific, and technological resources that maximize the provision of patient care.
- Define patient medication therapy management services in various pharmacy practice settings.

      Transitional:
- Interpret assessment feedback from others to identify performance strengths and areas in need of refinement or mediation.
- Self-assess the effectiveness of learning performance.
- Formulate strategies to address performance areas in need of refinement or remediation.
- Initiate action to correct identified learning deficiencies.
- Formulate a strategy to assess abilities in critical analysis and logical thinking.

- Formulate a strategy to participate in inquiry for professional improvement.
- Use concepts of drug use evaluation to develop effective guidelines for a drug use evaluation program.
- Use effective communication skills to work with ancillary personnel, other pharmacists, and managers.
- Outline a plan for patient medication therapy management services in various pharmacy practice settings.

Advanced:
- Regularly self-assess learning needs for ongoing personal and professional growth.
- Engage in learning activities on a regular, ongoing basis for personal and professional development.
- Regularly engage in inquiry, critical analysis, and logical thinking in personal and professional activities.
- Integrate new resources into the practice setting to achieve desired goals.
- Use pharmacoeconomic principles in practice to achieve desired goals.
- Implement patient medication therapy management services in various pharmacy practice settings.

B. Manage medication use systems.

1. Apply patient- and population-specific data, quality assurance strategies, and research processes to assure that medication use systems minimize drug misadventuring and optimize patient outcomes.

   a. **Utilizing systems to document drug misadventuring, enhance patient safety, and maintain quality assurance by identifying, preventing and/or resolving medication-related problems**

      Foundational:
      - Describe the consequences of specific drug interactions.
      - Identify plasma level ranges for efficacy and toxicity for various medications.
      - Collect and maintain information necessary to achieve optimal and safe therapeutic outcomes.
      - Define quality assurance and give examples of associated activities.

      Transitional:
      - Outline procedures for assigning levels of severity to specific drug interactions.
      - Develop a plan of action for therapeutic interventions once problems are identified.
      - Design and manage a medication use system that systematically and continuously evaluates and improves the utilization of medications in a patient population.
      - Identify and report medication errors and adverse drug events to appropriate individuals and organizations.
      - Record information related to identification, resolution or prevention of medication-related problems in individual patients.
      - Develop and conduct health screening, promotion and prevention programs.

      Advanced:
      - Manage the incidence of medication errors and adverse drug events
      - Evaluate information obtained from adverse drug event and medication error reporting systems to identify preventable causes.
      - Recommend actions to minimize the occurrence of adverse drug events and medication errors.
      - Complete a medication use evaluation.
      - Implement changes in a system based on results of a medication use evaluation.
      - Devise a plan for meeting health care needs related to the targeted patient populations.

b. Preparing and administering prescriptions or medication orders

Foundational:
- Prepare proper labeling and select packaging for a drug product.
- Use pharmaceutics to assess physical and chemical compatibility of drug delivery systems for safe preparation and administration.
- Use organized record systems to store patient data, receive or transmit prescriptions, store and access patient information and maintain drug dispensing, labeling and inventory records for all medications.
- Observe automation commonly used in pharmacy practice.

Transitional:
- Prepare, compound and dispense drug products.
- Develop skills for administration of select drug products including injectables.
- Select or recommend the appropriate drug delivery system.
- Use mathematical competencies and technical skills necessary for the preparation of drug products.
- Demonstrate proper aseptic technique.
- Demonstrate techniques for safe handling of pharmaceuticals and biohazardous materials.
- Describe automation commonly used in pharmacy practice.

Advanced:
- Assure an operational check and balance system to minimize drug-dispensing errors and maximize patient safety.
- Use proper procedures and aseptic technique for assuring safe handling of potentially cytotoxic drugs.
- Explain how the medication administration report interfaces with commonly used pharmacy automation.

2. Apply patient- and population-specific data, quality assurance strategies, and research processes to develop drug use and health policy, and to design pharmacy benefits.

Foundational:
- Use health care system information to project future economic and manpower needs for pharmacy practice.
- Use a systemic problem-solving process to make decisions about managing human, economic, scientific, and technological resources that maximize the provision of patient care.
- Identify and describe components of pharmacy benefit programs and health care policy.

Transitional:
- Use concepts of drug use evaluation to develop effective guidelines for a drug use evaluation program.
- Use effective communication skills to work with ancillary personnel, other pharmacists, and managers.
- Demonstrate the ability to process prescriptions using third-party payor programs.

Advanced:
- Outline procedures for effective management of a drug formulary.
- Demonstrate the ability to work effectively within a formulary system.
- Formulate a strategy to integrate new resources into the practice setting to achieve desired goals.
- Use pharmacoeconomic principles in practice to achieve desired goals.
- Demonstrate the ability to practice pharmacy within a managed care environment.
- Assist patients in understanding health care policy.

3. Communicate and collaborate with prescribers, patients, caregivers, other involved health care providers and administrative and supportive personnel to identify and resolve medication use problems.

    a. Utilizing systems to document drug misadventures, enhance patient safety, and maintain quality assurance

        Foundational:
- Recognize and report drug misadventures.
- Collect data for medication use evaluation.

        Transitional:
- Manipulate a comprehensive database of information necessary to achieve optimal and safe therapeutic outcomes.
- Explain the rationale for medication use evaluation.

        Advanced:
- Describe a comprehensive database of information necessary to achieve optimal and safe therapeutic outcomes.
- Design and complete a medication use evaluation.
- Implement system changes based on results of medication use evaluations and drug misadventure reports.

    b. Collaborating and communicating effectively

        Foundational:
- Identify issues that are important to the patient regarding their health care.
- Learn effective teamwork skills.
- Apply communication principles to solve communication challenges with patients and health care professionals.
- Apply communication principles to counsel patients about their medications.
- Apply communication skills to conduct patient medication history interviews.
- Apply communication skills to write recommendations for changes in drug therapy.
- Identify issues that are important to the patient regarding their health care.

        Transitional:
- Learn effective teamwork skills.
- Collaborate with the health care team to identify medication use system issues.
- Utilize counseling and medication histories to improve medication use systems.

        Advanced:
- Develop appropriate mechanisms in medication use systems to provide patient counseling and medication history services.
- Organize information systems for verbal or written communication to patients, consumers or health care professionals.
- Verbally convey information to patients, consumers or health care professionals using effective communication skills.
- Write clear, concise information for patients, consumers or health care professionals using effective writing skills.
- Design and utilize effective strategies to influence preventive health care behavior within medication use systems.
- Prepare and deliver effective health education information to individuals and groups.
- Function as as effective member of the interprofessional team as it relates to appropriate utilization within medication use systems.

4. Carry out duties in accordance with legal, ethical, social, economic, and professional guidelines.

a. Taking into consideration personal values, ethical principles, and caring

Foundational:
- Identify and describe how values impact upon personal behavior and the provision of pharmacist-provided patient care.
- Identify values which impact upon the behavior of others involved in the patient care process (patients, allied health care providers, administrators, payors, etc.)
- Predict how values impact the behavior of others involved in the patient care process.
- Uphold the duties and responsibilities of the pharmacist as stated in the Oath of Professionalism.
- Identify the characteristics of caring behavior.
- Uphold the College's Code of Professional Conduct and Honor Code.

Transitional:
- Describe the major ethical theories that impact on the provision of health care.
- Describe the key ethical principles that impact on the provision of health care (e.g., autonomy, beneficence, nonmaleficence, justice).
- Describe how the decision-making process can be integrated with ethical theories and principles to resolve ethical health care dilemmas.
- Relate personal values to the process of ethical health care decisions.
- Relate professional values to the process of ethical decision-making in relation to the provision of pharmacist-provided patient care.
- Describe the professional behavior necessary to demonstrate a caring attitude.

Advanced:
- Employ major ethical theories and principles and a systematic decision-making process to resolve ethical patient care dilemmas in personal, societal, and professional context.
- Analyze the ethical principles, theories and decision-making processes employed by others to resolve a given ethical health care problem.
- Evaluate the ethical accountability of an action, intention or outcome relative to a given ethical health care problem.
- Demonstrate a caring attitude in the provision of pharmacist-provided patient care services to patients.
- Demonstrate behavior that fulfills the responsibilities and duties owed to the patient in the provision of pharmacist-provided patient care.
- Integrate ethical principles into one's professional conduct.

b. Applying legal and regulatory requirements

Foundational:
- Identify resources that help maintain the pharmacist's current awareness of regulatory requirements affecting the practice of pharmacy.
- Explain federal and state laws and regulations pertaining to the practice of pharmacy.
- Know legal requirements for dispensing, counseling and filing individual prescriptions and scheduled drug inventory records.

Transitional:
- Observe legal principles and regulatory requirements in the practice of pharmacy.

Advanced:
- Develop a plan for keeping current with changes in laws and regulations pertaining to the practice of pharmacy.

5. Maintain professional competence by identifying and analyzing emerging issues, products, and services that may impact medication use systems, to develop drug use and health policy, and to design pharmacy benefits. (continuing professional development)

Foundational:
- Articulate personal approach to learning including time management strategies, optimal locations for study and utilization of available instructional resources.
- Identify strengths and weaknesses within personal approach to learning.
- Formulate strategies to address identified weaknesses in personal approach to learning.
- Describe the relationship of instructional strategies and assessment processes within individual courses to stated learning objectives.
- Use learning objectives to guide learning efforts including the selection and use of instructional resources to facilitate learning.
- Identify the characteristics of the spirit of inquiry, critical analysis and logical thinking.
- Understand the obligation to participate in inquiry and professional improvement.
- Describe postgraduate opportunities for ongoing personal and professional learning.
- Explain the necessity of lifelong learning to maintain professional competence and personal growth.
- Use health care system information to project future economic and manpower needs for pharmacy practice.
- Use a systematic problem-solving process to make decisions about managing human, economic, scientific, and technological resources that maximize the provision of patient care.
- Define patient medication therapy management services in various pharmacy practice settings.

Transitional:
- Interpret assessment feedback from others to identify performance strengths and areas in need of refinement or mediation.
- Self-assess the effectiveness of learning performance.
- Formulate strategies to address performance areas in need of refinement or remediation.
- Initiate action to correct identified learning deficiencies.
- Formulate a strategy to assess abilities in critical analysis and logical thinking.
- Formulate a strategy to participate in inquiry for professional improvement.
- Use concepts of drug use evaluation to develop effective guidelines for a drug use evaluation program.
- Use effective communication skills to work with ancillary personnel, other pharmacists, and managers.
- Outline a plan for patient medication therapy management services in various pharmacy practice settings.

Advanced:
- Regularly self-assess learning needs for ongoing personal and professional growth.
- Engage in learning activities on a regular, ongoing basis for personal and professional development.
- Regularly engage in inquiry, critical analysis, and logical thinking in personal and professional activities.
- Integrate new resources into the practice setting to achieve desired goals.
- Use pharmacoeconomic principles in practice to achieve desired goals.
- Implement patient medication therapy management services in various pharmacy practice settings.

III. **PUBLIC HEALTH** Promote health improvement, wellness, and disease prevention in cooperation with patients, communities, at-risk populations, and other members of an interprofessional team of health care providers.

    A. Assure the availability of effective, quality health and disease prevention services.

        1. Apply population-specific data, quality assurance strategies, and research processes to develop identify and resolve public health problems.

Foundational:
- Adhere to professional practices that minimize the risk of substance abuse or chemical dependency by oneself and by pharmacists.
- Explain potential risks and consequences of substance abuse and toxic exposure.
- Describe the signs and symptoms of substance abuse and toxic exposure.
- Describe information sources for substance abuse and toxic exposure prevention, detection, and treatment.
- Recognize potential risks and consequences of medication misuse, substance abuse and toxic exposure.
- Recognize the importance of the pharmacist in health and wellness screening programs.
- Identify areas of need for health and wellness screening.
- Participate in health and wellness screening programs.

Transitional:
- Provide educational materials or activities for health care professionals and consumers on the prevention of substance abuse and chemical dependency.
- Provide materials or activities for health care professionals and consumers on poison prevention.
- Develop health education, preventive care and wellness programs.
- Recognize drugs with high abuse potential.
- Recognize situations of potential substance abuse or toxic exposure.
- Facilitate health and wellness screening programs.
- Develop interprofessional strategies for conducting health and wellness screening programs.

Advanced:
- When substance abuse or toxic exposure is known, implement appropriate interventions.
- Design a patient care plan to manage poisonings or drug overdoses commonly seen in the practice environment.
- Implement health education, preventive care and wellness programs.
- Design and implement health and wellness screening programs.
- Recommend patient-specific health and wellness screenings.

        2. Communicate and collaborate with prescribers, policy makers, members of the community and other involved health care providers and administrative and supportive personnel to identify and resolve public health problems.

            a. Demonstrating effective leadership and involvement in professional and social endeavors

Foundational:
- Identify personal interaction behaviors and those of others in interpersonal, intergroup and leadership situations in personal and professional activities.
- Evaluate the appropriateness of personal interaction behavior and those of others in interpersonal, intergroup and leadership situations in personal and professional activities.

- Provide feedback to increase effectiveness of others in interpersonal, intergroup and leadership situations in personal and professional activities.
- Identify appropriate strategies to develop leadership skills in professional (organizational and practice) and personal situations.
- Actively seek membership in professional organizations.

Transitional:
- Use appropriate interaction behavior in interpersonal, intergroup and leadership situations in professional and personal activities.
- Employ feedback from others to enhance personal effectiveness in interpersonal, intergroup, and leadership situations in professional and personal activities.
- Contribute opinions, insights, information and leadership assertively and appropriately during group decision making situations in professional and personal activities.
- Actively participate in organizational, community, and campus matters.

Advanced:
- Use appropriate interpersonal and intergroup behavior during professional interactions with patients, other health care providers and the public.
- Adapt interpersonal and intergroup behaviors to differing professional environments (practice and organizational).
- Contribute opinions, insights, information and leadership assertively and appropriately during health care team decision-making processes.
- Assume leadership positions in professional and civic organizations on human health and non-health related matters.
- Apply ethical behaviors in collaborating with others.

b. Evaluating, integrating, and managing human, economic, scientific, and technological resources

Foundational:
- Use health care system information to project future economic and manpower needs for pharmacy practice.
- Use a systemic problem-solving process to make decisions about managing human, economic, scientific, and technological resources that maximize the provision of patient care.
- Explain the social, political, and economic factors involved in the U.S. system of health care delivery.
- Describe the principles that influence the distribution of pharmaceutical products and services.

Transitional:
- Explain the principles of pharmacoepidemiology to the study of drug use and outcomes in large populations.
- Use effective communication skills to work with ancillary personnel, other pharmacists, and managers.
- Outline procedures for effective management of a drug formulary.

Advanced:
- Demonstrate the ability to work effectively within a formulary system.
- Formulate a strategy to integrate new resources into the practice setting to achieve desired goals.
- Use pharmacoeconomic principles in practice to achieve desired patient care goals.
- Apply principles of pharmacoepidemiology to the study of drug use and outcomes in large populations.
- Apply tools, including informatics, needed to assess and address change, increase competitiveness, improve quality, and optimize patient services.

3. Carry out duties in accordance with legal, ethical, social, economic, and professional guidelines.

   a. Taking into consideration personal values, ethical principles and caring

   Foundational:
   - Identify and describe how values impact upon personal behavior and the provision of pharmacist-provided patient care.
   - Identify values which impact upon the behavior of others involved in the patient care process (patients, allied health care providers, administrators, payors, etc.)
   - Predict how values impact the behavior of others involved in the patient care process.
   - Uphold the duties and responsibilities of the pharmacist as stated in the Oath of Professionalism.
   - Identify the characteristics of caring behavior.
   - Uphold the College's Code of Professional Conduct and Honor Code.

   Transitional:
   - Describe the major ethical theories that impact on the provision of health care.
   - Describe the key ethical principles that impact on the provision of health care (e.g., autonomy, beneficence, nonmaleficence, justice).
   - Describe how the decision-making process can be integrated with ethical theories and principles to resolve ethical health care dilemmas.
   - Relate personal values to the process of ethical health care decisions.
   - Relate professional values to the process of ethical decision-making in relation to the provision of pharmacist-provided patient care.
   - Describe the professional behavior necessary to demonstrate a caring attitude.

   Advanced:
   - Employ major ethical theories and principles and a systematic decision-making process to resolve ethical patient care dilemmas in personal, societal, and professional context.
   - Analyze the ethical principles, theories and decision-making processes employed by others to resolve a given ethical health care problem.
   - Evaluate the ethical accountability of an action, intention or outcome relative to a given ethical health care problem.
   - Demonstrate a caring attitude in the provision of pharmacist-provided patient care services to patients.
   - Demonstrate behavior that fulfills the responsibilities and duties owed to the patient in the provision of pharmacist-provided patient care.
   - Integrate ethical principles into one's professional conduct.
   - Apply ethical issues related to the development, promotion, sales, prescription, and use of drugs.

   b. Applying legal, professional, and ethical principles and regulatory requirements

   Foundational:
   - Identify resources that help maintain the pharmacist's current awareness of regulatory requirements affecting the practice of pharmacy.
   - Explain federal and state laws and regulations pertaining to the practice of pharmacy.
   - Know legal requirements for dispensing, counseling and filing individual prescriptions and scheduled drug inventory records.

   Transitional:
   - Observe legal principles and regulatory requirements in the practice of pharmacy.
   - Describe pharmacists responsibilities and limits under the law.

Advanced:
- Develop a plan for keeping current with changes in laws and regulations pertaining to the practice of pharmacy.

4. Maintain professional competence by identifying and analyzing emerging issues, products, and services that may affect the efficacy or quality of disease prevention services to amend existing or develop additional services. (continuing professional development)

Foundational:
- Articulate personal approach to learning including time management strategies, optimal locations for study and utilization of available instructional resources.
- Identify strengths and weaknesses within personal approach to learning.
- Formulate strategies to address identified weaknesses in personal approach to learning.
- Describe the relationship of instructional strategies and assessment processes within individual courses to stated learning objectives.
- Use learning objectives to guide learning efforts including the selection and use of instructional resources to facilitate learning.
- Identify the characteristics of the spirit of inquiry, critical analysis and logical thinking.
- Understand the obligation to participate in inquiry and professional improvement.
- Describe postgraduate opportunities for ongoing personal and professional learning.
- Explain the necessity of lifelong learning to maintain professional competence and personal growth.

Transitional:
- Interpret assessment feedback from others to identify performance strengths and areas in need of refinement or mediation.
- Self-assess the effectiveness of learning performance.
- Formulate strategies to address performance areas in need of refinement or remediation.
- Initiate action to correct identified learning deficiencies.
- Formulate a strategy to assess abilities in critical analysis and logical thinking.
- Formulate a strategy to participate in inquiry for professional improvement.

Advanced:
- Regularly self-assess learning needs for ongoing personal and professional growth.
- Engage in learning activities on a regular, ongoing basis for personal and professional development.
- Regularly engage in inquiry, critical analysis, and logical thinking in personal and professional activities.

B. Develop public health policy.

1. Apply population-specific data, quality assurance strategies, and research processes to develop public health policy.

Foundational:
- Use health care system information to project future economic and manpower needs for pharmacy practice.
- Use a systemic problem-solving process to make decisions about managing human, economic, scientific, and technological resources that maximize the provision of patient care.

Transitional:
- Use concepts of medication use evaluation to develop effective guidelines for a drug use evaluation program.
- Use effective communication skills to work with ancillary personnel, other pharmacists, and managers.

Advanced:
- Outline procedures for effective management of a drug formulary.
- Demonstrate the ability to work effectively within a formulary system.
- Formulate a strategy to integrate new resources into the practice setting to achieve desired goals.
- Use pharmacoenomic principles in practice to achieve desired goals.
- Demonstrate the ability to practice pharmacy within a managed care environment.

2. Communicate and collaborate with prescribers, policy makers, members of the community and other involved health care providers and administrative and supportive personnel to identify and resolve public health problems.

   a. Demonstrating effective leadership and involvement in professional and social endeavors

Foundational:
- Identify personal interaction behaviors and those of others in interpersonal, intergroup and leadership situations in personal and professional activities.
- Evaluate the appropriateness of personal interaction behavior and those of others in interpersonal, intergroup and leadership situations in personal and professional activities.
- Provide feedback to increase effectiveness of others in interpersonal, intergroup and leadership situations in personal and professional activities.
- Identify appropriate strategies to develop leadership skills in professional (organizational and practice) and personal situations.
- Actively seek membership in professional organizations.

Transitional:
- Use appropriate interaction behavior in interpersonal, intergroup and leadership situations in professional and personal activities.
- Employ feedback from others to enhance personal effectiveness in interpersonal, intergroup, and leadership situations in professional and personal activities.
- Contribute opinions, insights, information and leadership assertively and appropriately during group decision making situations in professional and personal activities.
- Actively participate in organizational, community, and campus matters.

Advanced:
- Use appropriate interpersonal and intergroup behavior during professional interactions with patients, other health care providers and the public.
- Adapt interpersonal and intergroup behaviors to differing professional environments (practice and organizational).
- Contribute opinions, insights, information and leadership assertively and appropriately during health care team decision-making processes.
- Assume leadership positions in professional and civic organizations on human health and non-health related matters.
- Apply ethical behaviors in collaborating with others.

   b. Evaluating, integrating, and managing human, economic, scientific, and technological resources

Foundational:
- Use health care system information to project future economic and manpower needs for pharmacy practice.
- Use a systemic problem-solving process to make decisions about managing human, economic, scientific, and technological resources that maximize the provision of patient care.

- Explain the social, political, and economic factors involved in the U.S. system of health care delivery.
- Describe the principles that influence the distribution of pharmaceutical products and services.

Transitional:
- Explain the principles of pharmacoepidemiology to the study of drug use and outcomes in large populations.
- Use effective communication skills to work with ancillary personnel, other pharmacists, and managers.
- Outline procedures for effective management of a drug formulary.

Advanced:
- Demonstrate the ability to work effectively within a formulary system.
- Formulate a strategy to integrate new resources into the practice setting to achieve desired goals.
- Use pharmacoeconomic principles in practice to achieve desired patient care goals.
- Apply principles of pharmacoepidemiology to the study of drug use and outcomes in large populations.
- Apply tools, including informatics, needed to assess and address change, increase competitiveness, improve quality, and optimize patient services.

3. Carry out duties in accordance with legal, ethical, social, economic, and professional guidelines.

   a. **Taking into consideration personal values, ethical principles and caring**

      Foundational:
      - Identify and describe how values impact upon personal behavior and the provision of pharmacist-provided patient care.
      - Identify values which impact upon the behavior of others involved in the patient care process (patients, allied health care providers, administrators, payors, etc.)
      - Predict how values impact the behavior of others involved in the patient care process.
      - Uphold the duties and responsibilities of the pharmacist as stated in the Oath of Professionalism.
      - Identify the characteristics of caring behavior.
      - Uphold the College's Code of Professional Conduct and Honor Code.

      Transitional:
      - Describe the major ethical theories that impact on the provision of health care.
      - Describe the key ethical principles that impact on the provision of health care (e.g., autonomy, beneficence, nonmaleficence, justice).
      - Describe how the decision-making process can be integrated with ethical theories and principles to resolve ethical health care dilemmas.
      - Relate personal values to the process of ethical health care decisions.
      - Relate professional values to the process of ethical decision-making in relation to the provision of pharmacist-provided patient care.
      - Describe the professional behavior necessary to demonstrate a caring attitude.

      Advanced:
      - Employ major ethical theories and principles and a systematic decision-making process to resolve ethical patient care dilemmas in personal, societal, and professional context.
      - Analyze the ethical principles, theories and decision-making processes employed by others to resolve a given ethical health care problem.
      - Evaluate the ethical accountability of an action, intention or outcome relative to a given ethical health care problem.

- Demonstrate a caring attitude in the provision of pharmacist-provided patient care services to patients.
- Demonstrate behavior that fulfills the responsibilities and duties owed to the patient in the provision of pharmacist-provided patient care.
- Integrate ethical principles into one's professional conduct.
- Apply ethical issues related to the development, promotion, sales, prescription, and use of drugs.

b. Applying legal, professional, and ethical principles and regulatory requirements

Foundational:
- Identify resources that help maintain the pharmacist's current awareness of regulatory requirements affecting the practice of pharmacy.
- Explain federal and state laws and regulations pertaining to the practice of pharmacy.
- Know legal requirements for dispensing, counseling and filing individual prescriptions and scheduled drug inventory records.

Transitional:
- Observe legal principles and regulatory requirements in the practice of pharmacy.
- Describe pharmacists responsibilities and limits under the law.

Advanced:
- Develop a plan for keeping current with changes in laws and regulations pertaining to the practice of pharmacy.

4. Maintain professional competence by identifying and analyzing emerging issues, products, and services that may affect the efficacy or quality of disease prevention services to amend existing or develop additional services. (continuing professional development)

Foundational:
- Articulate personal approach to learning including time management strategies, optimal locations for study and utilization of available instructional resources.
- Identify strengths and weaknesses within personal approach to learning.
- Formulate strategies to address identified weaknesses in personal approach to learning.
- Describe the relationship of instructional strategies and assessment processes within individual courses to stated learning objectives.
- Use learning objectives to guide learning efforts including the selection and use of instructional resources to facilitate learning.
- Identify the characteristics of the spirit of inquiry, critical analysis and logical thinking.
- Understand the obligation to participate in inquiry and professional improvement.
- Describe postgraduate opportunities for ongoing personal and professional learning.
- Explain the necessity of lifelong learning to maintain professional competence and personal growth.

Transitional:
- Interpret assessment feedback from others to identify performance strengths and areas in need of refinement or mediation.
- Self-assess the effectiveness of learning performance.
- Formulate strategies to address performance areas in need of refinement or remediation.
- Initiate action to correct identified learning deficiencies.
- Formulate a strategy to assess abilities in critical analysis and logical thinking.
- Formulate a strategy to participate in inquiry for professional improvement.

Advanced:
- Regularly self-assess learning needs for ongoing personal and professional growth.
- Engage in learning activities on a regular, ongoing basis for personal and professional development.
- Regularly engage in inquiry, critical analysis, and logical thinking in personal and professional activities.