

PRCT 554
INSTITUTIONAL PHARMACY
ADVANCED PHARMACY PRACTICE EXPERIENCE

Course Description

An advanced practice experiential course designed to provide the student with practical experience in the profession of pharmacy. The course consists of interactions with both patients and healthcare workers across multiple disciplines.

Credit Hours: 5
Prerequisites: B.S. in Pharmaceutical Sciences or equivalent
Meeting times: Monday thru Friday, 8 hours per day, 40 hours per week
Other times as assigned by preceptors or instructors

Locations: Varied depending on rotation site as assigned by course coordinator.

Course Resources

Web site: All announcements related to this course will be posted to the PY4 announcements page. Students are responsible for checking this page daily.

Equipment: Lab coat

Staff Information

Kristopher Harrell, Pharm.D.
Director of Professional Experience Programs
Course Coordinator
Office: UMMC, PH105
Phone: (601) 984-2622
e-mail: kharrell@umc.edu

Site Contact (preceptor of record):

Preceptor/faculty contact information can be found on the online rotation management website and will be made available to the student. The student will interact primarily with the preceptor of record; however, students are encouraged to contact Dr. Harrell throughout the rotation via email for specific concerns or to set up individual meetings, if needed.

Course Objectives

General

- Further prepare students for the profession of pharmacy through continuous professional development and promotion of lifelong learning by providing them with supervised practical experience.
- Build upon introductory pharmacy practice rotations and provide students with more direct patient care and related activities specifically in the **institutional pharmacy** practice setting.

Hospital pharmacy administration

- Understand the basic organization of a hospital and the role of the pharmacy as a department within that hospital.
- Understand the principles of a formulary system and the Pharmacy and Therapeutics Committee and can demonstrate his ability to apply these principles by preparing agenda or individual drug monograph for committee.
- Understand the principles of budgeting, purchasing and inventory control.
- Understand the legal requirements for establishing and operating a hospital pharmacy department.
- Become familiar with required departmental reports and demonstrate the ability to prepare such reports.
- Understand the reasons for maintaining procedure manuals and can demonstrate the ability to prepare specified sections of such a manual.
- Understand the role of the manufacturer's representatives and can formulate policies regarding their activities within the institution.
- Understand The Joint Commission accreditation process.
- Understand the role of the pharmacy technician in the provision of pharmaceutical services in the hospital and can demonstrate knowledge of the components of a technician-training program.
- Understand the concepts of quality assurance and can demonstrate using outcomes to improve system processes.

Distributive and preparation components

- Understand the policies and procedures and can demonstrate the ability to function in the inpatient distribution system currently employed by the department.
- Understand why the medication distribution system was chosen for the hospital and can demonstrate knowledge of alternate systems that could be used.
- Understand after-hours service policy and demonstrates an ability to formulate alternatives to procedures employed.
- Understand the procedures relative to the administration of medications by nursing or pharmacy services.
- Demonstrate the ability to research data regarding drug usage and disease patterns within the hospital.
- Understand the relationship of outpatient pharmacy to pharmacy department and can demonstrate ability to process a variety of prescriptions in this area.
- Demonstrate ability to consult with patients regarding use, cautions and storage of their prescribed medications.
- Demonstrate sterile technique in the manufacture of intravenous admixtures and extemporaneous sterile preparations.
- Demonstrate knowledge of the appropriate indications, manufacturer, administration, and monitoring parameters for parenteral nutrition, lipids, and enteral nutrition.
- Demonstrate knowledge of the information sources on parenteral drug therapy.
- Demonstrate knowledge of the necessary policies, procedures and techniques required to repackage manufactured pharmaceuticals and to research and prepare an extemporaneous or bulk basis special formulations for use within the hospital.

Drug Information component

- Demonstrate verbal and written communication skills as a necessary means to receive and disseminate drug information.
- Demonstrate an understanding of proper filing of drug information materials.

- Understand how to organize and operate a drug information service including physical accommodations, reference sources, budgeting, responsibilities and documentation of services.
- Demonstrate knowledge of how to organize, prepare and disseminate an in-house pharmacy newsletter (for the medical staff and/or nursing service).
- Evaluate potentially toxic drug ingestion and communicate with both patients and other health care professionals concerning signs and symptoms, general supportive care, and specific treatment.

Patient care

- Demonstrate ability in a variety of patient care settings to obtain medication histories, review chart material, participate in rounding, conduct discharge interviews and perform other functions which will have an effect on the therapy employed in patient care.
- Demonstrate the ability to effectively understand and interpret the medical management of a hospitalized patient and communicate via a grand rounds presentation a work-up of the patient, and assessment of the drug therapy decisions.
- Demonstrate the ability to understand basic applied pharmacokinetic principles as it relates to rational drug therapy by providing consultation regarding drug management of a hospital patient.

Professionalism

- Demonstrate a positive attitude toward practice of pharmacy.
- Use good professional judgment and demonstrate ability to cope with a variety of situations.
- Communicate effectively and appropriately.
- Show initiative.
- Exercise punctuality and maintain expected attendance.

Additional *site-specific rotation objectives* may be assigned by the preceptor in this document, or as an attachment, and will be provided to the student by the first day of the rotation.

Evaluation

The student should be evaluated based on overall performance in meeting the objectives of the rotation. The evaluation should be evidenced-based and involve student self-reflection, as well as constructive preceptor feedback.

The student is expected to complete a self-evaluation of his or her performance of the desired ability-based outcomes providing details of required and other activities performed during the rotation. The **Institutional Pharmacy Advance Practice Experience Transcript** should be used for this purpose. The preceptor should use the same document to review student performance and provide additional comments or evidence.

The evaluation of the student is to be completed online using the online rotation management system. A **mid-point** evaluation is to be completed and reviewed with the student **between the second and third weeks** of the rotation.

Once the transcript is completed and evidence is documented, the final evaluation is to be entered online. The online evaluation is based on the preceptor evaluation of student (**PEOS-IX**) form. This form can also be found on the preceptor zone of the www.pharmd.org website under “assessment forms” and in the PEP manual located on the same website.

On the **last day** of the rotation the preceptor should assign a **final grade**. The preceptor is to discuss the final evaluation with the student on the last day of the rotation.

Grading Scale:

Z scale (Pass/Fail)

An Incomplete (I) grade is posted for those students for whom evaluations (grades) are not received or if course requirements are incomplete.

Educational Outcomes

This course fosters development in several of the general education abilities and professional education abilities that have been defined as desired outcomes of the School of Pharmacy curriculum. Throughout the rotation period, students will be provided with opportunities to practice these abilities. Please keep in mind these outcome goals as you monitor your progress in this course.

The abilities fostered in this course are stated in the following table.

EDUCATIONAL OUTCOMES FOR PRCT 554		
General Education Abilities	Major outcome of this course	Minor outcome of this course
Critical Thinking, Analysis and Decision-Making "The student can find, understand, analyze, evaluate, and synthesize information and make informed, rational, and responsible decisions."	✓	
Communication Skills "The student can communicate with various audiences by written, verbal, and electronic media for a variety of purposes."	✓	
Mathematical Competence "The student is proficient in the expression of quantitative relationships and can perform the needed mathematical operations to infer their consequences."	✓	
Professional Education Abilities	Major outcome of this course	Minor outcome of this course
1a. Collect and organize patient data, medical records, interviews, and psychomotor evaluations	✓	
1b. Evaluate and interpret patient data	✓	
1d. Apply knowledge of specified drugs and drug classes	✓	
1e. Apply knowledge of specific physiologic systems	✓	
1f. Apply knowledge of specific disease pathology and comorbid conditions	✓	
2a. Apply understanding of indications for pharmacologic and non-pharmacologic therapy	✓	
2b. Apply clinical reasoning skills in drug product selection, chemical entity, dosage formulation based on principles of pharmaceuticals, medicinal and natural product chemistry	✓	
2c. Develop appropriate dosing regimens, which reflect application of knowledge of pharmaceutical calculations, initial dose, dose titration, and dosage adjustments	✓	
2d. Prepare accurate patient-specific pharmaceutical agents, dosage forms and delivery systems	✓	

2e. Develop rational plans for monitoring therapeutic outcomes	✓	
2f. Develop rational plans for monitoring and managing adverse events	✓	
2g. Develop plans for anticipating, avoiding, and resolving drug interactions, drug-drug interactions, drug-food interactions, drug-disease interactions, drug-lab interactions, and drug-procedure interactions	✓	
2h. Develop plans for patient education on drug therapy and therapeutic lifestyle changes	✓	
2i. Document recommendations and services accurately and comprehensibly	✓	
4a. Appropriately manage resources to maximize economic, clinical and humanistic outcomes for patients, and effectively manage financial, personnel, time, and technology resources	✓	
4b. Appropriately manage safe, accurate and time-sensitive medication distribution	✓	
4c. Apply ethics and professional principles to assure efficient utilization of resource management and effective treatment choices		✓
4d. Assure that medication use systems minimize medication errors and optimize patient outcomes	✓	
4e. Develop proposals for establishing, marketing, and being compensated for medication therapy management and patient care services rendered	✓	
4f. Practice in accordance with state and federal regulations and statutes	✓	
5a. Employ communication styles and techniques appropriate to the audience	✓	
5b. Work effectively within a multidisciplinary/interdisciplinary environment	✓	
5c. Include patient and caregiver as integral parts of a treatment plan	✓	
8a. Serve as reliable and credible source of drug information	✓	
8b. Effectively educate patients utilizing all appropriate communication modalities (verbal, written, other)	✓	
8d. Present effective educational programs and presentations to public and health care profession audiences	✓	
9a. Demonstrate knowledge of the impact of health care systems on pharmacy practice	✓	
9b. Demonstrate understanding of the influences of legislation on pharmacy practice	✓	
11a. Take responsibility for gathering new knowledge		✓

Expectations

1. Students are assigned eight advanced pharmacy practice experience rotations, four required and four electives. The four required rotations are adult medicine, ambulatory care, community practice, and institutional practice. Of the remaining elective rotations, two must involve patient care, and these are assigned based on student preferences and preceptor availabilities. Students are notified of rotation assignments during the Spring semester of the third professional year. Should any changes be necessary students will be notified in writing in advance of the rotation.

2. Students will be expected to spend forty hours per week at the practice sites. These hours will be counted toward pharmacist licensure requirement in accordance with regulations of the Mississippi State Board of Pharmacy.
3. Students will be expected to send their assigned preceptors a cover letter and a copy of their curriculum vita two weeks before the beginning of the rotations. They should then follow up with their assigned preceptors via phone or email one week prior to rotation start dates. The phone numbers and email addresses for the preceptors are listed online at the rotation management website. Students may be asked to provide certain documentation to the school or practice site prior to the rotation. For more specific information about rotation administrative and health requirements, refer to the PEP Manual. The subsequent meeting times and expectations of the student should be outlined by the preceptors during the first meeting.
4. Students are expected to be punctual. If absences occur for any reason, the students must contact the preceptor. More than one unexcused absence results in course failure. Should a student miss more than 4 days of a given rotation, the student will have to repeat the rotation before receiving credit for the course. For more information about absences, refer to the PEP Manual.
5. Students will be expected to complete all required activities, as well as site-specific activities assigned by the preceptor. The following required activities for this course must be completed and documented on the online management system at least once during the rotation:
 - a. Aseptic Technique/Intravenous Admixture
 - b. Case Presentation
 - c. Continuity of Care Exercise
 - d. Discharge Counseling
 - e. Drug Information Question
 - f. Home Meds/MAR Review
 - g. Institutional Medication Management
 - h. Institutional Policy Exercise
 - i. Medication Administration Exercise
 - j. Medication Distribution /QA Process
 - k. Order Management / Appropriate Storage Exercise
 - l. Parenteral Nutrition Management
 - m. Pharmaceutical Industry Exercise
 - n. Pharmacokinetics
 - o. Technician Training Activity
 - p. The Joint Commission Exercise
6. Students will be expected to complete the transcript and evaluation of his or her preceptor on the online rotation management website by the last day of the rotation.

Failure to submit any single item by the end of the rotation will result in an “incomplete” grade, which can then become an “F” per University policy. For more information students should refer to the PEP Manual for general rotation policies.

Student attire: Compliance with the dress code is expected. Various practice sites will have different requirements for dress, and students will be expected to comply with those requirements at the discretion of the preceptor. I.D. badges are required, and during practice rotations, lab coats are as well.

Students with disabilities: It is the responsibility of any student with a disability who requests a reasonable accommodation to contact the Office of Student Disability Services (662-915-7128). SDS will then contact the instructor through the student by means of an Instructor Notification of Classroom Accommodations form. The Instructor will then be happy to work with the student so that a reasonable accommodation for a disability can be made. This contact with SDS should be made as soon as possible after classes begin such that the appropriate preparation for the student may be planned.

If necessary, the syllabus may be modified at any point during the rotation period. Students taking the course will be notified in writing of any changes.

Institutional Pharmacy Advance Practice Experience Transcript

Student name _____

Preceptor Name _____

UM Professional Ability-Based Outcomes	<i>Course Objectives</i>	Required Activities /Additional Evidence
1a. Collect and organize patient data, medical records, interviews, and psychomotor evaluations	<i>Demonstrate ability in a variety of patient care settings to obtain medication histories, review chart material, participate in rounding, conduct discharge interviews and perform other functions which will have an effect on the therapy employed in patient care; Demonstrate the ability to effectively understand and interpret the medical management of a hospitalized patient and communicate via a grand rounds presentation a work-up of the patient, and assessment of the drug therapy decisions</i>	<input type="checkbox"/> Home Meds/MAR Review <input type="checkbox"/> Case Presentation <input type="checkbox"/> Institutional Medication Management
1b. Evaluate and interpret patient data	<i>Demonstrate ability in a variety of patient care settings to obtain medication histories, review chart material, participate in rounding, conduct discharge interviews and perform other functions which will have an effect on the therapy employed in patient care; Demonstrate the ability to effectively understand and interpret the medical management of a hospitalized patient and communicate via a grand rounds presentation a work-up of the patient, and assessment of the drug therapy decisions</i>	<input type="checkbox"/> Home Meds/MAR Review <input type="checkbox"/> Case Presentation <input type="checkbox"/> Institutional Medication Management
1d. Apply knowledge of specified drugs and drug classes	<i>Evaluate potentially toxic drug ingestion and communicate with both patients and other health care professionals concerning signs and symptoms, general supportive care, and specific treatment; Demonstrate knowledge of the information sources on parenteral drug therapy; Demonstrate the ability to effectively understand and interpret the medical management of a hospitalized patient and communicate via a grand rounds presentation a work-up of the patient, and assessment of the drug therapy decisions</i>	<input type="checkbox"/> Drug Overdose Exercise <input type="checkbox"/> Parenteral Nutrition Management <input type="checkbox"/> Case Presentation <input type="checkbox"/> Institutional Medication Management
1e. Apply knowledge of specific physiologic systems	<i>Evaluate potentially toxic drug ingestion and communicate with both patients and other health care professionals concerning signs and symptoms, general supportive care, and specific treatment; Demonstrate knowledge of the information sources on parenteral drug therapy; Demonstrate the ability to effectively understand and interpret the medical management of a hospitalized patient and communicate via a grand rounds presentation a work-up of the patient, and assessment of the drug therapy decisions</i>	<input type="checkbox"/> Drug Overdose Exercise <input type="checkbox"/> Parenteral Nutrition Management <input type="checkbox"/> Case Presentation <input type="checkbox"/> Institutional Medication Management
1f. Apply knowledge of specific disease pathology and comorbid conditions	<i>Evaluate potentially toxic drug ingestion and communicate with both patients and other health care professionals concerning signs and symptoms, general supportive care, and</i>	<input type="checkbox"/> Drug Overdose Exercise <input type="checkbox"/> Parenteral Nutrition Management <input type="checkbox"/> Case Presentation <input type="checkbox"/> Institutional Medication Management

	<i>specific treatment; Demonstrate knowledge of the information sources on parenteral drug therapy; Demonstrate the ability to effectively understand and interpret the medical management of a hospitalized patient and communicate via a grand rounds presentation a work-up of the patient, and assessment of the drug therapy decisions</i>	
2a. Apply understanding of indications for pharmacologic and non-pharmacologic therapy	<i>Demonstrate knowledge of the appropriate indications, manufacturer, administration, and monitoring parameters for parenteral nutrition, lipids, and enteral nutrition</i>	<input type="checkbox"/> Parenteral Nutrition Management
2b. Apply clinical reasoning skills in drug product selection, chemical entity, dosage formulation based on principles of pharmaceuticals, medicinal and natural product chemistry	<i>Demonstrate knowledge of the appropriate indications, manufacturer, administration, and monitoring parameters for parenteral nutrition, lipids, and enteral nutrition; Demonstrate the ability to effectively understand and interpret the medical management of a hospitalized patient and communicate via a grand rounds presentation a work-up of the patient, and assessment of the drug therapy decisions</i>	<input type="checkbox"/> Parenteral Nutrition Management <input type="checkbox"/> Case Presentation <input type="checkbox"/> Institutional Medication Management
2c. Develop appropriate dosing regimens, which reflect application of knowledge of pharmaceutical calculations, initial dose, dose titration, and dosage adjustments	<i>Demonstrate knowledge of the appropriate indications, manufacturer, administration, and monitoring parameters for parenteral nutrition, lipids, and enteral nutrition; Demonstrate the ability to understand basic applied pharmacokinetic principles as it relates to rational drug therapy by providing consultation regarding drug management of a hospital patient</i>	<input type="checkbox"/> Parenteral Nutrition Management <input type="checkbox"/> Pharmacokinetics
2d. Prepare accurate patient-specific pharmaceutical agents, dosage forms and delivery systems	<i>Demonstrate sterile technique in the manufacture of intravenous admixtures and extemporaneous sterile preparations; Demonstrate knowledge of the necessary policies, procedures and techniques required to repackage manufactured pharmaceuticals and to research and prepare an extemporaneous or bulk basis special formulations for use within the hospital; Demonstrate the ability to understand basic applied pharmacokinetic principles as it relates to rational drug therapy by providing consultation regarding drug management of a hospital patient</i>	<input type="checkbox"/> Aseptic Technique/Intravenous Admixture <input type="checkbox"/> Pharmacokinetics <input type="checkbox"/> Order Management / Appropriate Storage Exercise
2e. Develop rational plans for monitoring therapeutic outcomes	<i>Demonstrate knowledge of the appropriate indications, manufacturer, administration, and monitoring parameters for parenteral nutrition, lipids, and enteral nutrition; Demonstrate the ability to understand basic applied pharmacokinetic principles as it relates to rational drug therapy by providing consultation regarding drug management of a hospital patient</i>	<input type="checkbox"/> Parenteral Nutrition Management <input type="checkbox"/> Pharmacokinetics <input type="checkbox"/> Institutional Medication Management
2f. Develop rational plans for monitoring and managing adverse events	<i>Demonstrate the ability to understand basic applied pharmacokinetic principles as it relates to rational drug therapy by providing consultation regarding drug management of a hospital patient</i>	<input type="checkbox"/> Pharmacokinetics

2g. Develop plans for anticipating, avoiding, and resolving drug interactions, drug-drug interactions, drug-food interactions, drug-disease interactions, drug-lab interactions, and drug-procedure interactions	<i>Demonstrate the ability to understand basic applied pharmacokinetic principles as it relates to rational drug therapy by providing consultation regarding drug management of a hospital patient</i>	<input type="checkbox"/> Pharmacokinetics
2h. Develop plans for patient education on drug therapy and therapeutic lifestyle changes	<i>Demonstrate the ability to understand basic applied pharmacokinetic principles as it relates to rational drug therapy by providing consultation regarding drug management of a hospital patient</i>	<input type="checkbox"/> Pharmacokinetics
2i. Document recommendations and services accurately and comprehensibly	<i>Demonstrate the ability to understand basic applied pharmacokinetic principles as it relates to rational drug therapy by providing consultation regarding drug management of a hospital patient</i>	<input type="checkbox"/> Pharmacokinetics
4a. Appropriately manage resources to maximize economic, clinical and humanistic outcomes for patients, and effectively manage financial, personnel, time, and technology resources	<i>Understand the principles of budgeting, purchasing and inventory control; Become familiar with required departmental reports and demonstrate the ability to prepare such reports; Understand after-hours service policy and demonstrate an ability to formulate alternatives to procedures employed; Demonstrate an understanding of proper filing of drug information materials; Understand how to organize and operate a drug information service including physical accommodations, reference sources, budgeting, responsibilities and documentation of services</i>	<input type="checkbox"/> Order Management / Appropriate Storage Exercise <input type="checkbox"/> Institutional Policy Exercise
4b. Appropriately manage safe, accurate and time-sensitive medication distribution	<i>Understand the policies and procedures and can demonstrate the ability to function in the inpatient distribution system currently employed by the department; Understand why the medication distribution system was chosen for the hospital and can demonstrate knowledge of alternate systems that could be used; Understand the relationship of outpatient pharmacy to pharmacy department and can demonstrate ability to process a variety of prescriptions in this area; Demonstrate sterile technique in the manufacture of intravenous admixtures and extemporaneous sterile preparations; Demonstrate knowledge of the necessary policies, procedures, and techniques required to repackage manufactured pharmaceuticals and to research and prepare an extemporaneous or bulk basis special formulations for use within the hospital</i>	<input type="checkbox"/> Medication Distribution /QA Process <input type="checkbox"/> Continuity of Care Exercise <input type="checkbox"/> Aseptic Technique/Intravenous Admixture
4c. Apply ethics and professional principles to assure efficient utilization of resource management and effective treatment choices	<i>Use good professional judgment and demonstrate ability to cope with a variety of situations</i>	<input type="checkbox"/> Pharmaceutical Industry Exercise
4d. Assure that medication use systems minimize medication errors and optimize patient outcomes	<i>Understand the concepts of quality assurance and can demonstrate using outcomes to improve system processes</i>	<input type="checkbox"/> Medication Distribution /QA Process

4e. Develop proposals for establishing, marketing, and being compensated for medication therapy management and patient care services rendered	<i>Become familiar with required departmental reports and demonstrate the ability to prepare such reports</i>	<input type="checkbox"/> Institutional Policy Exercise
5a. Employ communication styles and techniques appropriate to the audience	<i>Demonstrate ability to consult with patients regarding use, cautions and storage of their medications; Demonstrate verbal and written communication skills as a necessary means to receive and disseminate drug information; Demonstrate knowledge of how to organize, prepare and disseminate an in-house pharmacy newsletter (for the medical staff and/or nursing service); Demonstrate a positive attitude toward the practice of pharmacy; Communicate effectively and appropriately</i>	<input type="checkbox"/> Discharge Counseling
5b. Work effectively within a multidisciplinary/ interdisciplinary environment	<i>Understand the role of the manufacturer's representatives and can formulate policies regarding their activities within the institution; Understand the role of the pharmacy technician in the provision of pharmaceutical services in the hospital and can demonstrate knowledge of the components of a technician-training program; Understand the procedures relative to the administration of medications by nursing service or pharmacy services; Demonstrate ability in a variety of patient care settings to obtain medication histories, review chart material, participate in rounding, conduct discharge interviews and perform other functions which will have an effect on the therapy employed in patient care; Use good professional judgment and demonstrate ability to cope with a variety of situations; Communicate effectively and appropriately; Exercise punctuality and maintain expected attendance</i>	<input type="checkbox"/> Pharmaceutical Industry Exercise <input type="checkbox"/> Technician Training Activity <input type="checkbox"/> Medication Administration Exercise
5c. Include patient and caregiver as integral parts of a treatment plan	<i>Demonstrate ability to consult with patients regarding use, cautions and storage of their prescribed medications</i>	<input type="checkbox"/> Discharge Counseling
8a. Serve as reliable and credible source of drug information	<i>Demonstrate verbal and written communication skills as a necessary means to receive and disseminate drug information</i>	<input type="checkbox"/> Drug Information Question
8b. Effectively educate patients utilizing all appropriate communication modalities (verbal, written, other)	<i>Demonstrate ability to consult with patients regarding use, cautions and storage of their prescribed medications</i>	<input type="checkbox"/> Discharge Counseling
8d. Present effective educational programs and presentations to public and health care profession audiences	<i>Demonstrate the ability to effectively understand and interpret the medical management of a hospitalized patient and communicate via a grand rounds presentation a work-up of the patient, and assessment of the drug therapy decisions</i>	<input type="checkbox"/> Case Presentation
9a. Demonstrate knowledge of the impact of health care systems on pharmacy practice	<i>Understand the basic organization of a hospital and the role of the pharmacy as a department within that hospital; Understand the Joint Commission accreditation process; Understand the relationship of outpatient pharmacy to</i>	<input type="checkbox"/> Medication Distribution /QA Process <input type="checkbox"/> The Joint Commission Exercise <input type="checkbox"/> Continuity of Care Exercise

	<i>pharmacy department and can demonstrate ability to process a variety of prescriptions in this area</i>	
9b. Demonstrate understanding of the influences of legislation on pharmacy practice	<i>Understand the legal requirements for establishing and operating a hospital pharmacy department; Understand the Joint Commission accreditation process</i>	<input type="checkbox"/> The Joint Commission Exercise
11a. Take responsibility for gathering new knowledge	<i>Show initiative</i>	

PRECEPTOR EVALUATION OF INSTITUTIONAL PHARMACY PRACTICE STUDENT (Form PEOS-IX)

This form may be used a guide to complete the online evaluation.

Instructions: Evaluate the student on each item. Using the scale below, note the score achieved by the student in each performance category. If a student receives any score less than 3 on any item, it must be addressed in the comments section.

- 0 = Not assessed
- 1 = Poorest Anticipated Performance
- 2 = Less than Expected Performance
- 3 = Minimum Expected Performance
- 4 = Better than Expected Performance
- 5 = Best Anticipated Performance

Ability Based Outcome and Corresponding Course Objectives	Evaluation Score
1a. Collect and organize patient data, medical records, interviews, and psychomotor evaluations <i>Demonstrate ability in a variety of patient care settings to obtain medication histories, review chart material, participate in rounding, conduct discharge interviews and perform other functions which will have an effect on the therapy employed in patient care; Demonstrate the ability to effectively understand and interpret the medical management of a hospitalized patient and communicate via a grand rounds presentation a work-up of the patient, and assessment of the drug therapy decisions</i>	
1b. Evaluate and interpret patient data <i>Demonstrate ability in a variety of patient care settings to obtain medication histories, review chart material, participate in rounding, conduct discharge interviews and perform other functions which will have an effect on the therapy employed in patient care; Demonstrate the ability to effectively understand and interpret the medical management of a hospitalized patient and communicate via a grand rounds presentation a work-up of the patient, and assessment of the drug therapy decisions</i>	
1d. Apply knowledge of specified drugs and drug classes <i>Evaluate potentially toxic drug ingestion and communicate with both patients and other health care professionals concerning signs and symptoms, general supportive care, and specific treatment; Demonstrate knowledge of the information sources on parenteral drug therapy; Demonstrate the ability to effectively understand and interpret the medical management of a hospitalized patient and communicate via a grand rounds presentation a work-up of the patient, and assessment of the drug therapy decisions</i>	
1e. Apply knowledge of specific physiologic systems <i>Evaluate potentially toxic drug ingestion and communicate with both patients and other health care professionals concerning signs and symptoms, general supportive care, and specific treatment; Demonstrate knowledge of the information sources on parenteral drug therapy; Demonstrate the ability to effectively understand and interpret the medical management of a hospitalized patient and communicate via a grand rounds presentation a work-up of the patient, and assessment of the drug therapy decisions</i>	
1f. Apply knowledge of specific disease pathology and comorbid conditions <i>Evaluate potentially toxic drug ingestion and communicate with both patients and other health care professionals concerning signs and symptoms, general supportive care, and specific treatment; Demonstrate knowledge of the information sources on parenteral drug therapy; Demonstrate the ability to effectively understand and interpret the medical management of a hospitalized patient and communicate via a grand rounds presentation a work-up of the patient, and assessment of the drug therapy decisions</i>	
2a. Apply understanding of indications for pharmacologic and non-pharmacologic therapy <i>Demonstrate knowledge of the appropriate indications, manufacturer, administration, and monitoring parameters for parenteral nutrition, lipids, and enteral nutrition</i>	
2b. Apply clinical reasoning skills in drug product selection, chemical entity, dosage formulation based on principles of pharmaceuticals, medicinal and natural product chemistry <i>Demonstrate knowledge of the appropriate indications, manufacturer, administration, and monitoring parameters for parenteral nutrition, lipids, and enteral nutrition; Demonstrate the ability to effectively understand and interpret the medical management of a hospitalized patient and communicate via a grand rounds presentation a work-up of the patient, and assessment of the drug therapy decisions</i>	

2c.	Develop appropriate dosing regimens, which reflect application of knowledge of pharmaceutical calculations, initial dose, dose titration, and dosage adjustments <i>Demonstrate knowledge of the appropriate indications, manufacturer, administration, and monitoring parameters for parenteral nutrition, lipids, and enteral nutrition; Demonstrate the ability to understand basic applied pharmacokinetic principles as it relates to rational drug therapy by providing consultation regarding drug management of a hospital patient</i>	
2d.	Prepare accurate patient-specific pharmaceutical agents, dosage forms and delivery systems <i>Demonstrate sterile technique in the manufacture of intravenous admixtures and extemporaneous sterile preparations; Demonstrate knowledge of the necessary policies, procedures and techniques required to repackage manufactured pharmaceuticals and to research and prepare an extemporaneous or bulk basis special formulations for use within the hospital; Demonstrate the ability to understand basic applied pharmacokinetic principles as it relates to rational drug therapy by providing consultation regarding drug management of a hospital patient</i>	
2e.	Develop rational plans for monitoring therapeutic outcomes <i>Demonstrate knowledge of the appropriate indications, manufacturer, administration, and monitoring parameters for parenteral nutrition, lipids, and enteral nutrition; Demonstrate the ability to understand basic applied pharmacokinetic principles as it relates to rational drug therapy by providing consultation regarding drug management of a hospital patient</i>	
2f.	Develop rational plans for monitoring and managing adverse events <i>Demonstrate the ability to understand basic applied pharmacokinetic principles as it relates to rational drug therapy by providing consultation regarding drug management of a hospital patient</i>	
2g.	Develop plans for anticipating, avoiding, and resolving drug interactions, drug-drug interactions, drug-food interactions, drug-disease interactions, drug-lab interactions, and drug-procedure interactions <i>Demonstrate the ability to understand basic applied pharmacokinetic principles as it relates to rational drug therapy by providing consultation regarding drug management of a hospital patient</i>	
2h.	Develop plans for patient education on drug therapy and therapeutic lifestyle changes <i>Demonstrate the ability to understand basic applied pharmacokinetic principles as it relates to rational drug therapy by providing consultation regarding drug management of a hospital patient</i>	
2i.	Document recommendations and services accurately and comprehensibly <i>Demonstrate the ability to understand basic applied pharmacokinetic principles as it relates to rational drug therapy by providing consultation regarding drug management of a hospital patient</i>	
4a.	Appropriately manage resources to maximize economic, clinical and humanistic outcomes for patients, and effectively manage financial, personnel, time, and technology resources <i>Understand the principles of budgeting, purchasing and inventory control; Become familiar with required departmental reports and demonstrate the ability to prepare such reports; Understand after-hours service policy and demonstrate an ability to formulate alternatives to procedures employed; Demonstrate an understanding of proper filing of drug information materials; Understand how to organize and operate a drug information service including physical accommodations, reference sources, budgeting, responsibilities and documentation of services</i>	
4b.	Appropriately manage safe, accurate and time-sensitive medication distribution <i>Understand the policies and procedures and can demonstrate the ability to function in the inpatient distribution system currently employed by the department; Understand why the medication distribution system was chosen for the hospital and can demonstrate knowledge of alternate systems that could be used; Understand the relationship of outpatient pharmacy to pharmacy department and can demonstrate ability to process a variety of prescriptions in this area; Demonstrate sterile technique in the manufacture of intravenous admixtures and extemporaneous sterile preparations; Demonstrate knowledge of the necessary policies, procedures, and techniques required to repackage manufactured pharmaceuticals and to research and prepare an extemporaneous or bulk basis special formulations for use within the hospital</i>	
4c.	Apply ethics and professional principles to assure efficient utilization of resource management and effective treatment choices <i>Use good professional judgment and demonstrate ability to cope with a variety of situations</i>	
4d.	Assure that medication use systems minimize medication errors and optimize patient outcomes <i>Understand the concepts of quality assurance and can demonstrate using outcomes to improve system processes</i>	
4e.	Develop proposals for establishing, marketing, and being compensated for medication therapy management and patient care services rendered <i>Become familiar with required departmental reports and demonstrate the ability to prepare such reports</i>	
5a.	Employ communication styles and techniques appropriate to the audience <i>Demonstrate ability to consult with patients regarding use, cautions and storage of their medications; Demonstrate verbal and written communication skills as a necessary means to receive and disseminate drug information; Demonstrate knowledge of how to organize, prepare and disseminate an in-house pharmacy newsletter (for the medical staff and/or nursing service); Demonstrate a positive attitude toward the practice of pharmacy; Communicate</i>	

<i>effectively and appropriately</i>	
5b. Work effectively within a multidisciplinary/ interdisciplinary environment <i>Understand the role of the manufacturer's representatives and can formulate policies regarding their activities within the institution; Understand the role of the pharmacy technician in the provision of pharmaceutical services in the hospital and can demonstrate knowledge of the components of a technician-training program; Understand the procedures relative to the administration of medications by nursing service or pharmacy services; Demonstrate ability in a variety of patient care settings to obtain medication histories, review chart material, participate in rounding, conduct discharge interviews and perform other functions which will have an effect on the therapy employed in patient care; Use good professional judgment and demonstrate ability to cope with a variety of situations; Communicate effectively and appropriately; Exercise punctuality and maintain expected attendance</i>	
5c. Include patient and caregiver as integral parts of a treatment plan <i>Demonstrate ability to consult with patients regarding use, cautions and storage of their prescribed medications</i>	
8a. Serve as reliable and credible source of drug information <i>Demonstrate verbal and written communication skills as a necessary means to receive and disseminate drug information</i>	
8b. Effectively educate patients utilizing all appropriate communication modalities (verbal, written, other) <i>Demonstrate ability to consult with patients regarding use, cautions and storage of their prescribed medications</i>	
8d. Present effective educational programs and presentations to public and health care profession audiences <i>Demonstrate the ability to effectively understand and interpret the medical management of a hospitalized patient and communicate via a grand rounds presentation a work-up of the patient, and assessment of the drug therapy decisions</i>	
9a. Demonstrate knowledge of the impact of health care systems on pharmacy practice <i>Understand the basic organization of a hospital and the role of the pharmacy as a department within that hospital; Understand the Joint Commission accreditation process; Understand the relationship of outpatient pharmacy to pharmacy department and can demonstrate ability to process a variety of prescriptions in this area</i>	
9b. Demonstrate understanding of the influences of legislation on pharmacy practice <i>Understand the legal requirements for establishing and operating a hospital pharmacy department; Understand the Joint Commission accreditation process</i>	
11a. Take responsibility for gathering new knowledge <i>Show initiative</i>	
General Professionalism Objectives	
Demonstrate a positive attitude toward practice of pharmacy.	
Use good professional judgment and demonstrate ability to cope with a variety of situations.	
Communicate effectively and appropriately.	
Show initiative.	
Exercise punctuality and maintain expected attendance.	

Comments
FINAL EVALUATION: <input type="checkbox"/> PASS <input type="checkbox"/> FAIL