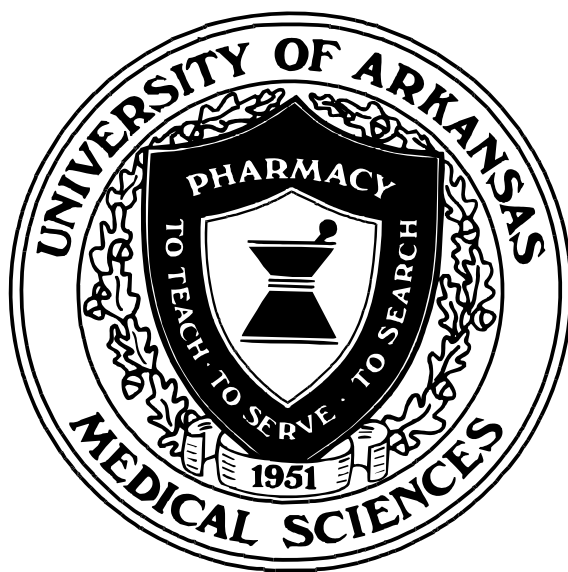


**DEPARTMENT OF
PHARMACY PRACTICE**

**Advanced Pharmacy Practice Experience
Indirect Patient Care:
Hospital/Health-System Pharmacy
Manual**

2009-2010



**UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES
4301 WEST MARKHAM STREET - SLOT 522-1
LITTLE ROCK, AR 72205-7122
(501) 686-6494
Fax: (501) 686-8104**

Advanced Pharmacy Practice Experience Indirect Patient Care: Hospital/Health-System Pharmacy

Schwanda Flowers, Pharm.D.

Assistant Dean for Experiential Education
College of Pharmacy
Office: 6/108 B
Phone: (501) 686-7920
Fax: (501) 686-8104
email: skflowers@uams.edu

Daniel C. Spadaro, Pharm.D.

Director, Advanced Pharmacy Practice
Experiential Education
Associate Professor, Pharmacy Practice
Office – 6/132c
Office Phone – 501-686-6491
Pager – 501-688-2813
Email: spadarodanielc@uams.edu
(Email is the preferred method for interacting)

“Any concerns, questions, or procedural matters related to this course should be addressed in the following order of progression: the Instructor or Course Coordinator, Departmental Chair, and finally the Dean’s office.”

“The course syllabus is a general plan for the course; the syllabus may be modified at any point during the year and deviations communicated to the class via UAMS email.”

This syllabus is for teaching purposes only and should be used in conjunction with the 4th Professional Year Experiential Course and Practice Site Specific Manuals as a required resource for this APPE

All Manuals can be accessed electronically at <http://www.uams.edu/cop/experiential/default.asp>.

Special thanks to the group below for their efforts in the development of this clerkship manual.

Departmental Faculty: Paul Gubbins, Pharm.D., Daniel Spadaro, Pharm.D., Ross Vanderbush, Pharm.D
Volunteer Faculty: Niki Duncan, Pharm.D., Don Johnson, M.S., Pharm.D., Brandy Owens, Pharm.D.
Dennis Moore, Pharm.D.

General Policies:

Challenge to Grade: Please refer to the appropriate section of the College of Pharmacy Student Handbook.

Missed Exams or Assignments: All work is due by the end of the clerkship. Unfinished work will result in an Incomplete (I) and will be handled as described in the 4th Professional Year Rotation Course Syllabus.

Attendance: As described in the 4th Professional Year Rotation Course Syllabus, there are no excused absences. Any absence from the clerkship must be made up in conjunction with the preceptor.

Academic Dishonesty: Students are expected to abide by the Pledge of Professionalism found in the Student Handbook. Academic dishonesty will be dealt with severely and may result in failure of the course. Examples of academic dishonesty include but are not limited to plagiarism or cheating.

Table of Contents

Justification	4
Goals	6
Competency Statements	7
Competency Assessment and online Grading	10
Grading Rubric	11
Appendix: Site Specific Information	17
Board of Pharmacy Approval of CE form	18

Advanced Pharmacy Practice Experience Indirect Patient Care: *Hospital/Health-System Pharmacy*

JUSTIFICATION

In view of the significant number of pharmacy practitioners who choose hospital pharmacy as a career path, the Advanced Pharmacy Practice Experience: Indirect Patient Care (APPE-IPC) - Hospital Pharmacy Practice clerkship is an integral element of pharmacy training. The APPE-IPC – Hospital/Health-System Pharmacy Practice clerkship provides the student opportunity to apply didactic information to the hospitalized patient, be involved in patient care in an inpatient setting, gain experience in processing of medication orders and the utilization of distribution systems unique to hospital pharmacy practice and gain an appreciation for hospital pharmacy management.

The experience will also provide a variety of exposures to increase the student's awareness of the basics of pharmacy operation, differences in practitioner philosophies and problem solving skills, the importance of effective communication between pharmacists and other health care providers, the role and responsibilities of a professionally oriented hospital pharmacist, the importance of monitoring drug utilization and outcomes, the organizational requirements necessary to achieve efficient operations, and the application of local, state and federal regulations governing the prescription dispensing process. The student will also gain an appreciation of the impact of hospital pharmacy practice on the health care system and public health, and an appreciation of patient education on health and drug-related matters.

In the development of this manual, the Accreditation Council for Pharmacy Education's (ACPE) and the Center for the Advancement of Pharmaceutical Education's (CAPE) educational outcomes were used as a guide for educational outcome performance.

ACPE's 2007 Standards state:

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, cultural, economic, and professional issues, emerging technologies, and evolving biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences that may impact therapeutic outcomes. Also, to 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.

The 2004 AACP educational outcome expectations include:

PHARMACEUTICAL CARE: Provide pharmaceutical 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 pharmaceutical, biomedical, sociobehavioral, and clinical sciences impacting outcomes.

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; to improve therapeutic outcomes of medication use; and to ensure cost effective medication utilization.

Advanced Pharmacy Practice Experience Indirect Patient Care (APPE-IPC): *Hospital/Health-System Pharmacy*

Goals

Introductory Pharmacy Practice Experience (IPPE) Goals Review

(Most students will have an understanding of these goals secondary to the IPPE occurring in the second year but with numerous sites and varying opportunities at those sites, these should be reviewed for student comprehension)

- To process prescriptions in a manner compatible with state of the art hospital pharmacy practice
- To develop a concern for the patient's health and welfare
- To develop an appreciation for the impact of hospital pharmacy practice on the health care system and public health
- To foster the development of a responsible professional attitude and judgment
- To foster an appreciation for patient education regarding health and drug-related matters
- To provide a variety of exposures to the basics of pharmacy operation and to different practitioner philosophies and problem solving skills
- To foster the application of didactic information to the hospitalized patient

Hospital/Health-System Pharmacy Goals (APPE-IPC):

- Demonstrate accurate, safe, and time-sensitive preparation, dispensing, and administration of pharmaceuticals
- Manage pharmacy resources to optimize pharmacotherapy outcome by applying principles of personnel management, fiscal resource management, medication distribution and control systems to the operation of a pharmacy
- Demonstrate professional citizenship in the distribution of medications and delivery of patient care by communicating with patients, healthcare professionals, and other stakeholders
- Apply research processes to inform pharmaceutical policy
- Demonstrate knowledge of the committee functions and regulatory processes associated with Hospital Pharmacy (JCAHO, Pharmacy Therapeutics Committee, Nursing/Pharmacy, state and federal law, etc.)
- Recognize the importance of developing multidisciplinary teams in an institutional environment
- Educate patients and health care providers about requirements for effective therapy
- Demonstrate ability to document actions taken to achieve desired outcomes

**Advanced Pharmacy Practice Experience
Indirect Patient Care: Hospital/Health-System Pharmacy**

APPE COMPETENCY STATEMENTS

UAMS COP Competency Number	Description
Domain 1	Overall
1.1	<p>Evaluate patient data and make an assessment</p> <ol style="list-style-type: none"> a. Identify and collect information from profiles, pharmacy, lab, and medical records, and patient (caretaker) history that will influence optimal drug choice and dosage b. Obtain a medical history (e.g., chief complaint, medical, medication management, financial, social, cultural, review of systems) c. Conduct a physical assessment <ul style="list-style-type: none"> • Apply knowledge of clinical laboratory data to monitor drug regimens • Accurately describe laboratory tests associated with monitoring a drug. d. Assess patient quality of life
1.2	<p>Conduct a systematic review of the patient prior to recommending any drug or non-drug therapy:</p> <ol style="list-style-type: none"> a. Identify drug-related problems including adverse drug reactions, drug interactions, and/or suboptimal treatment, b. Recognize common signs or symptoms indicative of disease control issues or drug-related problems, c. Ascertain levels of chronic disease control, d. Assess and address barriers to health care, and e. Collaborate with the patient or patient advocate to prioritize problems.
1.3	<p>Design and implement an individual patient-centered pharmacotherapy plan to maximize desired effects and minimize undesired effects</p> <ol style="list-style-type: none"> a. Conduct a focused evidence-based review of the necessary literature to determine the best evidence to support pharmacotherapy recommendations, applying pharmaceutical science principles b. Select prescription or non-prescription medications (including doses and dosage schedules), apply both pharmaceutical science and therapeutic principals <ul style="list-style-type: none"> • Apply pharmacokinetic principals, • Describe mechanisms of action of drugs, • Evaluate drug therapy for the presence of pharmacotherapeutic duplications and interactions • Identify indications, contraindications, warnings, and precautions associated with a drug product's active and inactive ingredients c. Evaluate patient factors that are relevant to selecting pharmacotherapy (e.g., sex, age, race, ethnicity, culture, and genetics) d. Define treatment goals and plan to monitor pharmacotherapy for safety and effectiveness, <ul style="list-style-type: none"> • Explain what the therapeutic outcome should be e. Consider non-drug therapy, therapeutic lifestyle changes, and preventive care issues, <ul style="list-style-type: none"> • Understand relevant diet, nutrition, and non-drug therapies f. Conduct patient education including verification of patient understanding of proper use of medication/device

	<p>g. Implement interventions to prevent or remedy non-adherence, and</p> <p>h. Implement interventions to resolve drug-related problems and unintended drug consequences.</p> <ul style="list-style-type: none"> • Explain adverse reactions associated with drugs dispensed
1.4	<p>Document patient care activities</p> <p>a. Document assessment and pharmacotherapy plan for individual patient encounters,</p> <p>b. Record actions taken to achieve desired therapeutic outcomes, and</p> <p>c. Document patient and provider education activities.</p>
1.5	<p>Demonstrate professional citizenship in the delivery of patient care</p> <p>a. Communicate with other health care professionals to obtain and share pertinent patient information and pharmacotherapy recommendations,</p> <ul style="list-style-type: none"> • Collaborate with other health professionals such as other pharmacists, medical staff, nurses, laboratory personnel, dietitians, and respiratory therapists <p>b. Perform duties in accordance with legal, ethical, social, economic, and professional guidelines,</p> <p>c. Maintain professional competence by identifying and analyzing emerging issues, products, and services that may impact patient care.</p> <p>d. Recognize and solve problems using creativity, analysis, and intuition.</p>
Domain 2	Overall
2.1	<p>Demonstrate accurate, safe, and time-sensitive preparation, dispensing, and administration of pharmaceuticals</p> <p>a. Accurately transcribe verbal and written prescriptions and ensure appropriateness of these drug orders,</p> <ul style="list-style-type: none"> • Can separate drug order from non drug orders., recognize drug interactions, know drug products., considers dose in relationship to age or size of patient
2.2	<p>Manage pharmacy resources to optimize pharmacotherapy outcomes:</p> <p>a. Employ principles of personnel management to the operation of a pharmacy,</p> <p>b. Use principles of fiscal resource management,</p> <p>c. Employ medication distribution and control systems to operate the pharmacy efficiently, and</p> <p>d. Evaluate and use appropriate automation and information technology to optimize medication dispensing and patient care.</p>
2.3	<p>Educate patients and health care providers about requirements for effective therapy</p> <p>a. Establish rapport with patients and other health care professionals to promote a team approach to patient care</p> <p>b. Counsel patients regarding purposes of their medications, potential adverse drug reactions, and other required information and</p> <p>c. Provide medication information to patients and health care providers to promote rational drug therapy.</p> <ul style="list-style-type: none"> • Demonstrate efficient use of drug information resources and, where applicable, retrieve therapeutic information from the Internet.
2.4	<p>Demonstrate professional citizenship in the distribution of medications</p> <p>a. Communicate with patients, providers, personnel, and other stakeholders to provide accurate and safe medication dispensing and resource management</p>

	<p>b. Perform duties in accordance with legal, ethical, social, economic, and professional guidelines</p> <ul style="list-style-type: none"> • Follow legal and professional guidelines • Demonstrate reliability in assignments • Demonstrate appropriate appearance and adherence to the institutional policies of experiential site • Demonstrate adherence to schedule • Demonstrate appropriate attitude toward learning experience <p>c. Maintain professional competence by identifying and analyzing emerging issues, products, and services that may impact medication distribution and the pharmacy business</p> <p>d. Recognize and solve problems using creativity, analysis, and intuition.</p>
Domain 3	Overall
3.1	<p>Demonstrate skills needed to participate in or provide preventive services:</p> <ol style="list-style-type: none"> a. Participate in disease prevention, b. Provide lifestyle and wellness counseling, c. Provide drug-therapy evaluation and monitor for medication safety, and d. Participate in public health education programs.
3.2	<p>Apply research processes to inform pharmaceutical policy:</p> <ol style="list-style-type: none"> a. Demonstrate the ability to conduct drug literature evaluations, b. Design quality improvement projects to improve medication use, c. Apply evidence-based principles when making pharmaceutical policy recommendations, including drug benefit design recommendations, and d. Apply principles of pharmacoeconomics and outcome assessment.
3.3	<p>Demonstrate professional citizenship to promote wellness and prevent disease:</p> <ol style="list-style-type: none"> a. Collaborate with various stakeholders pertaining to public health issues and pharmaceutical policy, b. Perform duties in accordance with legal, ethical, social, economic, and professional guidelines, c. Maintain professional competence by identifying and analyzing emerging issues, products, and services that may improve disease prevention and wellness and inform pharmaceutical policies, and d. Recognize and solve problems using creativity, analysis, and intuition.

COMPETENCY ASSESSMENT

In order to meet Guideline 14.5 and as outlined in Appendix C of the “*Accreditation Standards and Guidelines for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree*” adopted January 2006 by the Accreditation Council for Pharmacy Education, the College should provide a balanced series of required (the majority) and elective APPE that cumulatively provide sustained experiences of adequate intensity, duration, and breadth (in terms of patients and disease states that pharmacists are likely to encounter when providing care) to enable achievement of stated competencies as demonstrated by assessment of outcome expectations. Moreover, goals and objectives for each APPE should be mapped to the professional competencies to ensure that, when taken as a whole, each student’s experiential education will provide opportunity to achieve the stated competencies.

The Grading Rubric (Referred to as the UAMS Competency Assessment Form in your manual) was derived from our competency statements that reflects the minimum proficiency that a student should exhibit in order to graduate. The Grading Rubric was designed to be used by all APPE preceptors and students for both Midpoint and Final grades.

Each APPE will not provide the opportunity for the student to achieve all of the UAMS College of Pharmacy Competency statements. Therefore, using the Grading Rubric (UAMS Competency Assessment), during the Midpoint and Final evaluation the preceptor and student must assess which competencies the student met during the experience. If a competency was not covered please mark the “N/A” box on the online Grading Rubric.

The Grading Rubric is located under your login in the Education Management System (EMS) at <https://www.ems-webs.com/Arkansas/>. If you have difficulty with your username or password please contact Ellie Dickinson at 501-686-6494 or email her at eedickinson@uams.edu.

Once you login to EMS your student evaluations (Grading Rubric) is located under *Evaluations* on the left side of your home page. There you will be able to choose your student and complete the midpoint and final evaluations.

Please remember the **Midpoint and Final** evaluations must be completed by both the **Preceptor and Student**. Preceptors and Students will be able to complete their evaluations online using their individual logins. Additionally, a printed form of the UAMS Competency Assessment is available in the manual as a reference to aid in the evaluation process. This form is for preceptor and student use only and is not required by the College of Pharmacy.

Domain 1: Patient Care-Ensuring Appropriate Pharmacotherapy and Therapeutic Outcomes

The graduate will provide patient-centered care in cooperation with patients, prescribers, and other members of an inter-professional health care team based upon sound pharmacotherapy principles and evidence.

1.1 Collect and evaluate data		<input type="checkbox"/> NA
<ul style="list-style-type: none"> Recognizes patient-specific information is needed to provide patient-centered care 		1
<ul style="list-style-type: none"> Recognizes types of patient information (medical and medication history, financial, social, cultural factors) Recognizes physical assessment data; Conducts physical assessment with supervision (BP, Accucheck, etc) Recognizes quality of life indicators (ADLs, ADEs) 		2
<ul style="list-style-type: none"> Identifies types of patient information from records or from patient (medical and medication history, financial, social, cultural factors) Identifies physical assessment data from records; Conducts physical assessment (BP, Accucheck, etc) and interprets result Identifies quality of life indicators (ADLs, ADEs) 		3
<ul style="list-style-type: none"> Obtains patient-specific information (medical and medication history, financial, social, cultural factors) from records or from patient Collects appropriate patient-specific physical assessment data to incorporate into assessment Collects patient-specific quality of life indicators Includes little or no extraneous information 		4
<ul style="list-style-type: none"> Performs all activities to the level outlined in Row 4 Proficiently AND Assesses patient's quality of life 		5
1.2 Conduct a systematic review of the patient prior to recommending any drug or non-drug therapy		<input type="checkbox"/> NA
<ul style="list-style-type: none"> Recognizes the importance of patient-specific assessment to therapeutic recommendations 		1
<ul style="list-style-type: none"> Recognizes adverse and therapeutic effects of drug therapies Recognizes potential drug interactions Recognizes monitoring parameters indicative of disease control or adverse drug effects Recognizes barriers to health care (cultural, social, financial, literacy, etc) 		2
<ul style="list-style-type: none"> Identifies adverse and therapeutic effects of drug therapies Identifies potential drug interactions monitoring parameters indicative of disease control or adverse drug effects Identifies barriers to health care 		3
<ul style="list-style-type: none"> Identifies patient-specific signs/symptoms of disease control and any drug-related problems (adverse drug reactions, suboptimal therapy) Assesses level of disease control or drug-related problems based on patient-specific information to develop a problem list; Assessment addresses any barriers to optimal therapy Prioritizes problems related to self-care interventions Prioritizes problem list based on patient and health care provider collaborative relationships 		4
Performs all activities to the level outlined in Row 4 AND Anticipates changes in patient needs based on emerging differences in these variables		5
1.3 Design and implement an individual patient-centered pharmacotherapy plan to maximize desired effects and minimize undesired effects.		<input type="checkbox"/> NA
<ul style="list-style-type: none"> Recognizes tertiary references Knows basic concepts of chemistry and biology Recognizes patient factors contribute to pharmacotherapy outcomes 	<ul style="list-style-type: none"> Recognizes general treatment goals Recognizes non-pharmacologic and lifestyle interventions Recognizes the factual content of steps necessary for proper medication/device use. Recognizes interventions to prevent non-adherence 	1

COMPETENCY ASSESSMENT: <input type="checkbox"/> PRECEPTOR		<input type="checkbox"/> STUDENT	<input type="checkbox"/> MIDPOINT	<input type="checkbox"/> FINAL
<ul style="list-style-type: none"> Recognizes strengths/weaknesses of information sources Knows drug categories and indications and can identify primary treatment goals Identifies patient factors involved in pharmacotherapy 	<ul style="list-style-type: none"> Identifies the benefits of non-pharmacologic, lifestyle, and preventive care interventions Knows factual content of steps necessary for proper medication/device use. Lists the pros and cons of interventions useful in preventing or remedying non-adherence or drug related consequences. 			2
<ul style="list-style-type: none"> Selects appropriate tertiary references for situation. Knows drug categories and indications and can apply in simulated situation. Defines primary treatment goals and plan to monitor pharmacotherapy effectiveness. Assesses relevance of patient factors to select appropriate pharmacotherapy Assesses and evaluates desired outcome of non-pharmacologic, lifestyle, and preventive care interventions based on needs of individual patients 	<ul style="list-style-type: none"> Conducts patient education based on an understanding of patient needs/preferences and situation (cultural, social, economic, & education). Evaluates the current level of adherence to a treatment plan (pharmacologic and non-pharmacologic) and drug related consequences. Identifies interventions to prevent or remedy non-adherence or drug related consequences. 			3
<ul style="list-style-type: none"> Selects appropriate references (primary and tertiary) for application to individual patient situation. Selects/modifies/monitors medication therapy in <u>uncomplicated patients</u>. Defines individual patient treatment goals and plan to optimize pharmacotherapy outcomes. Recommends/modifies non-pharmacologic, lifestyle changes, and preventive care interventions based on individual needs of a patient Conducts individually tailored patient education based on an understanding of the patients needs/preferences and situation (cultural, social, economic, & education). Education includes assessment of patient understanding. Evaluates the current level of adherence to a treatment plan (pharmacologic and non-pharmacologic) and drug related consequences. Implements intervention individually tailored to the patient to prevent or remedy non-adherence or drug related consequences. 				4
<ul style="list-style-type: none"> Evaluates and selects appropriate references (primary and tertiary) for application to individual patient situation. Selects/modifies/monitors medication therapy in complicated patients. Defines individual patient treatment goals and plan to optimize pharmacotherapy outcomes. Recommends/modifies non-pharmacologic, lifestyle changes, and preventive care interventions based on individual needs of a patient with a plan to evaluate interventions Conducts individually tailored patient education based on an understanding of the patients needs/preferences and situation (cultural, social, economic, & education). Education includes verification of patient understanding. Evaluates the current level of adherence to a treatment plan (pharmacologic and non-pharmacologic) and drug related consequences. Implements intervention individually tailored to the patient to prevent or remedy non-adherence or drug related consequences and follows up with patient. 				5
1.4 Document patient care activities:				<input type="checkbox"/> NA
<ul style="list-style-type: none"> Difficult to read secondary to significant grammar, punctuation, and misspelling mistakes 				1
<ul style="list-style-type: none"> Documentation is easy to read and understand 				5
<ul style="list-style-type: none"> Recognizes that written documentation occurs in the practice of pharmacy 				1
<ul style="list-style-type: none"> Terminology not written on the appropriate level for the patient or healthcare providers. (> 2 incidences) Records information but information is incomplete (missing major facts). Organization difficult to follow and includes extraneous information. Inappropriate length for area norms. 				2
<ul style="list-style-type: none"> Occasional use (1-2 incidences) of inappropriate terminology 'above' or 'below' the appropriate level for the patient or healthcare providers Records information accurately, but information is incomplete (missing minor facts). Minor organizational flaws (misplaced information) and extraneous information included – length inappropriate for area norms. 				3

COMPETENCY ASSESSMENT: <input type="checkbox"/> PRECEPTOR		<input type="checkbox"/> STUDENT	<input type="checkbox"/> MIDPOINT	<input type="checkbox"/> FINAL
<ul style="list-style-type: none"> Occasional use (1-2 incidences) of inappropriate terminology 'above' or 'below' the appropriate level for the patient or healthcare providers. Records information accurately, and completely (all required elements of area norm such as SOAP note). Organized and easy to follow with some extraneous information included – longer than area norms. 				4
<ul style="list-style-type: none"> Written on the appropriate level – patient or healthcare provider. Records information clearly, accurately, completely (all required elements of area norm such as SOAP note) and is well organized with no extraneous information included. 				5
Domain 2: Dispensing and Pharmacy Resource Management				
The graduate will manage and use resources of the health care system, in cooperation with patients, prescribers, and other health care providers and administrative and supportive personnel to promote health and to provide, assess, and coordinate safe, accurate, and time-sensitive medication distribution.				
2.1 Demonstrate accurate, safe, and time-sensitive preparation, dispensing, and administration of pharmaceuticals				<input type="checkbox"/> NA
<ul style="list-style-type: none"> Recognizes brand and generic drugs necessary to meet needs of prescription dispensing. 				1
<ul style="list-style-type: none"> Identifies brand and generic drugs. When preparing prescription for dispensing product is pharmacologically eloquent (labeling & packaging) Recognizes parts of a legal prescription. Sometimes verifies accuracy. 				2
<ul style="list-style-type: none"> Accurately transcribes verbal and written prescriptions. Dispenses prescription drugs in appropriate packaging. Usually verifies accuracy. 				3
<ul style="list-style-type: none"> Accurately transcribes verbal and written prescriptions. Dispenses and administers prescription drugs including basic compounding. (ex. such as that which can be done in any community or hospital pharmacy) Always verifies accuracy. 				4
Performs all activities to the level outlined in Row 4 proficiently AND verifies pertinent patient information is correct, with verification done for accuracy by use of a multiple check system.				5
2.2 Manage pharmacy resources to optimize pharmacotherapy outcomes				<input type="checkbox"/> NA
<ul style="list-style-type: none"> Recognizes personnel involved in the delivery of pharmacotherapy to patients 				1
<ul style="list-style-type: none"> Lists personnel necessary to ensure delivery of pharmacotherapy Displays knowledge that other types of resources are used in the delivery of medication to patients 				2
<ul style="list-style-type: none"> Identifies personnel necessary to ensure delivery of pharmacotherapy to patients in light of regulatory constraints Describes simple distribution systems and other technology which are used in the delivery of pharmacotherapy to patients 				3
<ul style="list-style-type: none"> Demonstrates knowledge of management techniques related to ensuring appropriate personnel and fiscal resources necessary to deliver pharmacotherapy in light of regulatory constraints Explains complex distribution systems and other technology used in the delivery of pharmacotherapy to patients 				4
<ul style="list-style-type: none"> Optimizes pharmacotherapy delivery to the patient within the constraints of fiscal and human resources 				5
2.3 Educate patients and healthcare providers about requirements for effective therapy				<input type="checkbox"/> NA
<ul style="list-style-type: none"> Recognizes basic communication principles and techniques. Unable to recognize basic components of patient counseling (Prime Questions, open vs. closed ended questions) 				1
<ul style="list-style-type: none"> Recognizes basic components of patient counseling (Prime Questions; open vs. closed ended questions). 				2

COMPETENCY ASSESSMENT: <input type="checkbox"/> PRECEPTOR <input type="checkbox"/> STUDENT <input type="checkbox"/> MIDPOINT <input type="checkbox"/> FINAL	
<ul style="list-style-type: none"> Identifies required patient counseling information (OBRA '90) Demonstrates knowledge of basic medication information with peers. 	
<ul style="list-style-type: none"> Incorporates basic components of patient counseling (Prime Questions; open vs. closed ended questions) Includes required patient counseling information (OBRA '90) Communicate knowledge of basic medication information and basic drug interactions with simulated patients and healthcare providers Develops rapport with patients 	3
<ul style="list-style-type: none"> Demonstrates positive interactions with patients and healthcare providers Incorporates components of patient counseling and maintains control of the interaction Includes required patient counseling information (OBRA '90) Communicates patient specific drug therapy recommendations to patients and healthcare providers Develops rapport with healthcare professionals and patients Communicates medication information to patients and healthcare professionals 	4
<p>Performs all activities to the level outlined in Row 4 AND</p> <ul style="list-style-type: none"> Communicates specific drug therapy recommendations (including purpose of medications, potential adverse drug reactions, and other relevant information) to patients and healthcare providers for complex patients with multiple meds/disease states Provides follow up with patients and healthcare providers to monitor therapeutic outcomes 	5
Domain 3: Health Improvement, Wellness, and Disease Prevention	
The graduate will promote improved health, wellness, and disease prevention.	
3.1 Demonstrate skills needed to participate in or provide preventive services	<input type="checkbox"/> NA
<ul style="list-style-type: none"> Does not participate in screenings, health fairs or other public health/disease prevention activities 	1
<ul style="list-style-type: none"> Participates in technical aspects of screenings and health fairs (blood pressure, cholesterol, blood glucose) 	2
<ul style="list-style-type: none"> Participates in a variety of health and wellness screenings Identifies basic drug therapy and monitoring parameters 	3
<ul style="list-style-type: none"> Participates in a variety of health and wellness screenings and "brown-bag" events (applies basic drug therapy and monitoring parameters to specific patients). Provide public health education and disease prevention information 	4
<ul style="list-style-type: none"> Organizes and participates in a variety of health and wellness screenings and "brown-bag" events (applies basic drug therapy and monitoring parameters to specific patients). Demonstrates formal presentation skills on public health/disease prevention topics 	5
3.2 Apply research processes to inform pharmaceutical policy	<input type="checkbox"/> NA
<ul style="list-style-type: none"> Can perform a web-based search 	1
<ul style="list-style-type: none"> Identifies appropriate keywords for literature search Collects basic data from primary literature (population, methods, etc.) Recognizes managed care plans and institutional formularies have different drug availability 	2
<ul style="list-style-type: none"> Identifies appropriate keywords and databases for literature search Identifies efficacy endpoints from literature evaluation Identifies a variety of drug benefit designs regulated by third party administrators or institutional P&T committees 	3
<ul style="list-style-type: none"> Conducts a literature search and includes appropriate information for evaluation with minimal extraneous information 	4

COMPETENCY ASSESSMENT: <input type="checkbox"/> PRECEPTOR		<input type="checkbox"/> STUDENT	<input type="checkbox"/> MIDPOINT	<input type="checkbox"/> FINAL
<ul style="list-style-type: none"> Evaluates drug literature for efficacy, safety, and cost factors Describes how drug benefit design and process influence drug therapy Describes how the institutional formulary management process affects drug therapy 				
Performs all activities to the level outlined in Row 4 and recommends alternative therapy based on plan specifications				5
1.5, 2.4, & 3.3 Demonstrate professional citizenship in the delivery of patient care, in the distribution of medications, and to promote wellness & prevent disease				<input type="checkbox"/> NA
<ul style="list-style-type: none"> Inappropriately dressed, does not demonstrate respect for patients or other individuals. Does not maintain confidentiality Does not acknowledge limitations of therapeutic knowledge Unconcerned with patient's welfare 		<ul style="list-style-type: none"> Does not understand or comply with federal and state regulations concerning prescription competencies Rarely puts forth noticeable effort, ignores criticism or argues when criticized Does not behave ethically 		1
<ul style="list-style-type: none"> Appropriately groomed and dressed, displays proper respect for all individuals Maintains strict confidentiality Acknowledges limitations in therapeutic knowledge Places patient's welfare above personal self interest and is accountable and responsible for patient care 		<ul style="list-style-type: none"> Understands and complies with all state and federal regulations concerning prescription competencies Asks questions, independently seeks to increase knowledge, seeks constructive criticism Behaves ethically in all aspects of practice 		5

**Advanced Pharmacy Practice Experience
Grade Computation Summary**

	Student Points	Possible Domain Points ¹	% Score
Domain 1: Patient Care-Ensuring Appropriate Pharmacotherapy and Therapeutic Outcomes			
Domain 2: Dispensing and Pharmacy Resource Management			
Domain 3: Health Improvement, Wellness, and Disease Prevention			
Total			

¹ Represents the number of points available after subtracting the value of the domains marked "N/A". The percent score is then calculated as student points/possible domain points

Grading Scale:

A = 90 – 100%

B = 80 – 89%

C = 70 – 79%

F = less than 70%

Student Name: _____ **Date:** _____

APPENDICES

1. Request for Board of Pharmacy Approval of Continuing Education – this form is supplied to help promote student-presented Continuing Education programs at experiential sites.

- **Please follow Arkansas State Board of Pharmacy requirements for continuing education.**
- **Please mail or fax a copy of the Board approved CE form and the participant count for the program to:**
Schwanda Flowers, Pharm.D.
UAMS College of Pharmacy
Department of Experiential Education
4301 W. Markham Street Slot 522-1
Little Rock, AR 72205-7122

Fax: 501-686-8104

ARKANSAS STATE BOARD OF PHARMACY
101 EAST CAPITOL, Suite 218
LITTLE ROCK, AR 72201
Phone: (501) 682-0190 Fax: (501) 682-0195

FOR BOARD USE ONLY:

Drug Therapy or Patient Management: YES NO

Program ID # _____

REQUEST FOR BOARD OF PHARMACY APPROVAL OF CONTINUING EDUCATION

NOTE: THIS FORM MUST REACH THE BOARD OF PHARMACY OFFICE AT LEAST 15 DAYS BEFORE THE C.E. PROGRAM IS TO BE HELD. REQUESTS NOT RECEIVED WITHIN 15 DAYS OF THE DATE OF THE PROGRAM WILL BE RETURNED NON-APPROVED..

APPROVAL REQUESTED BY:

NAME: _____

PLEASE PRINT

ADDRESS: _____

CITY: _____

STATE: _____

ZIP: _____

PHONE #: _____

FAX #: _____

This is to affirm that the undersigned will be responsible for assuring that participants are present and that the program criteria is appropriate to meet the needs of the participating pharmacists.

****Signature of applicant for C.E. Program Approval:** _____

PROGRAM INFORMATION: (PLEASE LIMIT SPEAKERS CV'S OR RESUMES TO 5 PAGES OR LESS)

TITLE: _____

PRESENTER/SPEAKER: _____

LOCATION OF PROGRAM: _____

DATE PROGRAM TO BE PRESENTED: _____

PROGRAM BEGINS AT _____ a.m./p.m. AND ENDS AT _____ a.m./p.m.

DESCRIPTION OF PROGRAM CONTENT:

PROGRAM OBJECTIVES AND GOALS:

THE PROGRAM IS: LIVE AUDIO VISUAL CORRESPONDENCE

IF THE PROGRAM IS AN AUDIO VISUAL PRESENTATION PLEASE PROVIDE THE NAME OF THE LIVE MODERATOR: _____

DESCRIBE THE EVALUATION PROCESS:

SPECIFY HOW ACCREDITATION CERTIFICATION WILL BE PRESENTED TO PARTICIPANTS:

NUMBER OF HOURS REQUESTED:

1 HOUR

2 HOURS

1 ½ HOURS

OTHER _____

NUMBER OF HOURS APPROVED:

1 HOUR

2 HOURS

1 ½ HOURS

OTHER _____

APPROVED BY: _____

EXECUTIVE DIRECTOR

DATE: _____



THE INDIVIDUAL REQUESTING THE C.E. PROGRAM MUST ASSURE THAT EACH PARTICIPANT IS PRESENT AND COMPLETES THIS PORTION OF THE FORM.

NAME OF PARTICIPANT: _____

AR LICENSE # _____

PARTICIPANTS MUST KEEP A COPY OF THIS FORM FOR CE VERIFICATION