DOCTOR OF PHARMACY APPE
COURSE DESCRIPTION

A. Number & Level: **PHPR 8940**

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<th>Fall</th>
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<td>001:</td>
<td>August</td>
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<td>004:</td>
<td>November</td>
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<tr>
<td>099:</td>
<td>December</td>
<td>099: May</td>
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*NOTE* - Only register for **8** total rotations – December and May are used for out of sync students *only*

B. Credit Hours: One calendar month rotation = 4 semester hour credits

C. Prerequisites:
   - Successful completion (grade of ‘C’ or better) of all required coursework in the Doctor of Pharmacy program (This includes all coursework **except** graduate professional electives)
   - Specified health, legal, and professional requirements
   - Active Ohio Intern license
   - Active intern license in each state where APPE’s are completed

D. Instructors: Clinical faculty, prestige clinical faculty, and approved non-faculty clinical preceptors.

E. Course description: Advanced clinical experiences in institutional, community, ambulatory, and advanced inpatient pharmacy practice, and various elective experiences

F. APPE rotation selection requirements: A student is required to complete eight (8) APPE rotations as follows:
   a. One rotation in each of the following:
      - Community
      - Hospital/Health System
      - Ambulatory
      - Advanced Inpatient
   b. Four elective rotations – elective rotations can be any rotation type

G. Class size: Enrollment in any given rotation/area of practice will be limited by the number of preceptors available to provide instruction in that practice area. The number of students at a site at any one time will be limited by the capacity of that site and other obligations of the preceptor. Placements will be made in a manner that provides all students an equal opportunity to obtain the spots that they desire. In the event that the number of requests exceeds the capacity of the site, placement in that site will be the result of a random selection process.

H. Performance standards: To have successfully completed the APPE rotation sequence, the student must accomplish the following:
   a. A student must successfully complete eight (8) APPE rotations that meet the requirements listed in Section F. above
b. By the end of the rotation sequence, a student must successfully complete the general core rotation objectives (see core rotation requirements)

c. For each rotation, a student must have successfully met his/her site-specific responsibilities provided by the preceptor.

d. The student must complete an individual performance notebook including the list of skill based competencies (see attached) and submit this for review before the final APPE grade is assigned*

*eSubject to change based on the implementation of an electronic portfolio system. Information TBA

e. The “weekly student performance evaluation” (preceptor completes) and the “instruction evaluation” (student completes) form for each rotation must be completed online using the EMS website. Grades will not be assigned until both evaluations are completed for the rotation (see attached, pg. 25 and p.31)

I. Rotation selection process: Rotation sites will be assigned based on rotation availability, requirements, and student interest. To participate in the selection process, students must be on target to be in academic good standing and be able to start APPEs in August.

J. Grading: Student’s grades, for registration purposes, will either be "S" (Satisfactory) for passing the rotation or "U" (Unsatisfactory) for being unsatisfactory during the rotation. For exceptional student performance, a preceptor will be able to evaluate a student as PASSING WITH HONORS on the student's Weekly Student Performance Evaluation.

*Please note - A cumulative GPA of 3.0 or greater is required for degree completion. Due to the fact that APPEs are graded S/U, APPEs do not impact your GPA. Therefore, it is your responsibility to ensure that your GPA is 3.0 or better by the time you desire to graduate.

K. Non-UT-affiliated APPE sites:

- APPE sites not affiliated with The University of Toledo College of Pharmacy may be considered for a rotation if the experience offered by this rotation is deemed to enhance the education and/or training of the student beyond what can be offered by The University of Toledo College of Pharmacy. The decision regarding the ability for students to attend a non-UT-affiliated APPE site is up to the discretion of the Director of Advanced Experiential Programs.

- Participation in a non-UT rotation is contingent upon the implementation of an affiliation agreement between the site and the University. Also, the student must meet any additional site specific health, legal and professional requirements including additional background checks etc.

- The experiential department will make their best effort to implement an affiliation agreement with the site but the student should be aware that agreements can take many months to complete and an agreement between the two parties cannot always be reached.

- Each student will be permitted to complete no more than 1 rotation at a non-UT affiliated rotation site

- Contact information for a non-UT-affiliated site must be provided to Dr. Kaun by no later than Wednesday October 15th 2008
DOCTOR OF PHARMACY APPE OBJECTIVES

INTRODUCTION

General core objectives, Advanced Inpatient, Ambulatory Care, Hospital/Health System, and Advanced Practice Community Objectives are outlined on the following pages. Each rotation experience is defined in terms of necessary knowledge and skills that must be mastered for successful completion of that rotation. For each Pharm.D. APPE rotation, there are two levels of objectives defined as follows:

I. General Core Rotation Objectives
   - These objectives address competencies that students are expected to master regardless of the rotation specialty.

II. Advanced Inpatient, Ambulatory Care, Hospital/Health System, and Advanced Practice Community Objectives
   - These objectives address competencies in the four core rotations.

In addition, each Pharm.D. APPE rotation will have certain site specific responsibilities and obligations which students must meet and fulfill.

GENERAL PHILOSOPHY OF CORE ROTATION OBJECTIVES

For each rotation they are assigned to in the Doctor of Pharmacy program, students must perform at a level capable of achieving and/or exceeding the general and specific core rotation objectives set for each rotation. The preceptor will determine the student's progress towards meeting these objectives at the end of the rotation.

Knowledge: Throughout the APPE sequence, the student shall continually increase his/her depth and breadth of knowledge of disease states, diagnostic procedures, laboratory tests, drug selection, and pharmacotherapeutic issues. Emphasis will be placed on the essential knowledge of drugs and diseases pertinent to the patients the student is monitoring, and to the provision of appropriate pharmaceutical care.

Problem Solving Skills: Throughout the APPE sequence, the student shall continually improve his/her problem solving skills. Emphasis will be placed on evaluating the drug therapy of patients the student is monitoring.

Communication Skills: Interactions with individuals, either written or oral, is a continual aspect of being a pharmacist. Throughout the APPE sequence, the student shall continually improve his/her communication skills. Emphasis will be placed on the student developing appropriate communication skills with health professionals and patients. Avenues that may be used to master this objective include verbal presentations and in-services and written consultation reports and manuscript submissions.

Professionalism: Throughout the APPE sequence, the student shall conduct himself/herself in a professional manner.
**FUNDAMENTAL GOAL OF DOCTOR OF PHARMACY APPE EXPERIENCES**

To provide practical, closely supervised, intellectually stimulating professional experiences which will enable students to develop fundamental capabilities to become highly motivated, self-directed, ethically minded professionals with the mission and skills to advance pharmacy practice in any desired practice setting. Competency in clinical skills, knowledge, judgment, and communication provide the basis for the achievement of this fundamental goal.

**GENERAL CORE ROTATION OBJECTIVES**

At the conclusion of each rotation, when presented with a patient and his/her diagnoses, physical findings, laboratory results, medication list, and other pertinent information, the student will be able to:

**KNOWLEDGE OF DRUG THERAPY**

For each medication given to the patient:

a. Describe the mechanism of action  
b. Identify the indication for use and place in therapy  
c. List routes of administration  
d. Define onset and duration of action  
e. Identify significant drug interactions and drug-lab interactions  
f. Describe the pharmacokinetic features and the impact of the patient's factors on the medication's pharmacokinetic features  
g. List adverse effects and estimate the relative risk of occurrence  
h. List monitoring parameters for determination of efficacy and toxicity

**KNOWLEDGE OF DISEASE STATES**

Describe the symptomatology, physical findings, pathophysiology, diagnostic procedures, laboratory tests, primary and alternative pharmacotherapies, and non-pharmacological treatments for medical illnesses pertinent to the rotation specialty.

**KNOWLEDGE OF OTHER TREATMENT CONSIDERATIONS**

Describe other diagnostic, therapeutic, and procedural issues not specially addressed above.

**PROBLEM SOLVING SKILLS**

Utilize problem-solving skills to perform the following:

a. Integrate patient information and didactic information to:

   i. Identify appropriate patient monitoring parameters  
   ii. Construct a systemic approach to data collection and interpretation  
   iii. Delineate therapeutic goals and time frame for achievement  
   iv. Defend proposed treatment plans with information drawn from the current literature

b. Methodically identify and anticipate patient problems using a major "body systems" approach to:

   i. List possible alterations in a specific patient's course within a specific time interval  
   ii. Identify patient factors that may alter pharmacokinetic parameters of drugs
iii. Delineate specific modifications in the therapeutic regimen to adequately cope with the proposed alterations

c. Identify potential problems encountered with drug preparation and administration

COMMUNICATION SKILLS

Effectively communicate with patients and health professionals, as deemed appropriate by the preceptor, by the following:

i. Performing discharge counseling and thorough medication histories in applicable patients
ii. Performing brief dissertations on selected pharmacotherapeutic topics to physician and other health professionals
iii. Ensuring dissemination of therapeutic plans to physicians, nurses, pharmacists, and other appropriate health professionals
iv. Documenting clinical pharmacy input into the therapeutic approach by placing concise entries into the patient record

Retrieve, summarize, and disseminate relevant literature for use in the clinical decision making process.

PROFESSIONALISM

Express the highest degree of professional ethics when dealing with patients and health care professionals.

Express an appreciation for the personal and moral dilemmas confronting the family and patient with acute medical illnesses.

During a rotation, the student who fails to demonstrate the achievement of and/or a progression in achieving all general core rotation objectives will be made aware of the deficiencies in writing at the time the deficiencies are noted so that the student may take steps to correct the said deficiencies. All future APPE preceptors of the student will be made aware of the said deficiencies so that the said deficiencies may be resolved prior to the student's graduation and to circumvent the case that the said deficiencies are only temporarily improved. Performance evaluation on general objectives is contingent upon past or anticipated future performance. All general core rotation objectives must be satisfactorily achieved with respect to the student's experience for successful completion of the rotation sequence.
SITE SPECIFIC RESPONSIBILITIES

Each APPE rotation, in addition to general and specific core objectives, has a list of specific responsibilities that students must meet in order to successfully complete the rotation. These responsibilities include:

- Required activities and obligations
- Meeting minimum standards with respect to general core rotation objectives
- Passing of written and/or oral end-of-rotation examinations as requested by instructor

SKILL-BASED COMPETENCIES

Skill-based competencies are a roster of skills that students are encouraged to master by completion of the 8-month clinical APPE sequence. These skills are listed on adjoining pages. Copies of these pages should be placed in the student's Individual Performance Notebook (see below). *

* Subject to change based on the implementation of an electronic portfolio system. Information TBA
**SKILL-BASED COMPETENCIES**

I. COMMUNICATION

A. Written

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<th>1. Prepare a medication history write-up</th>
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<td>2. Prepare a handout for case presentation</td>
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<td>a. case summary</td>
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<td>b. presentation outline</td>
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<td>3. Prepare one article for pharmacy department newsletter</td>
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<td>4. Prepare a patient information sheet</td>
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<td>5. Prepare a drug information response in a practice setting</td>
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<td>6. Prepare a pharmacokinetic plan and write-up</td>
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<td>7. Prepare a pharmacotherapeutic plan</td>
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B. Verbal

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<th>1. Present a case presentation</th>
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<td>2. Present a continuing education conference or inservice to pharmacists</td>
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<td>3. Present a continuing education conference or inservice to nurses</td>
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<td>4. Participate in a health education program directed at a patient group</td>
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<td>5. Assess a patient medication profile</td>
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<td>6. Interact in one-on-one conferences</td>
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<td>7. Receive and respond to calls in a drug information practice setting</td>
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<td>8. Condense and present a selected article in journal club</td>
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<td>9. Take a medication history</td>
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<td>10. Counsel a patient on medications</td>
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<td>11. Demonstrate the ability to have positive encounters with all health professionals which includes appropriate assertiveness in sharing knowledge to the patient's best interest</td>
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C. Audio-Visual

Init. Date

____  ____  1. Complete a presentation using power point
____  ____  2. Complete a presentation utilizing a handout

II. PHARMACOKINETIC-RELATED

A. Calculate a creatinine clearance by formula, nomogram, and 24 hour urine collection:

____  ____  1. For an adult
____  ____  2. For an infant or child
____  ____  3. For a patient with renal insufficiency

B. Calculate body surface area:

____  ____  1. For an adult
____  ____  2. For an infant or child

C. Calculate ideal body weight:

____  ____  1. For an adult
____  ____  2. For an infant or child

D. Given serum concentration/lab value and appropriate patient data, design a dosage regimen for the following drugs:

____  ____  1. Warfarin
____  ____  2. Aminoglycoside
____  ____  3. Vancomycin
____  ____  4. Digoxin
____  ____  5. Phenytoin
____  ____  6. Narcotic analgesics
III. PHYSICAL ASSESSMENT

Init. Date

____ ____ A. Take a blood pressure
____ ____ B. Take a pulse
____ ____ C. Take a temperature
____ ____ D. Take a respiratory rate
____ ____ E. Check for peripheral (pretibial) edema

IV. INFORMATION SYSTEMS

A. Demonstrate the use of:

____ ____ 1. Iowa Drug Information Service
____ ____ 3. Micro Medix (Drug Dex)

V. PATIENT MONITORING

____ ____ A. Select appropriate patients for monitoring
____ ____ B. Identify and collect appropriate drug-related parameters
____ ____ C. Maintain an adequate patient data base
____ ____ D. Identify and prioritize major problems relating to drug therapy
____ ____ E. Assess the appropriateness of each patient's drug therapy
____ ____ F. Construct a pharmacotherapeutic plan
____ ____ G. Present relevant patient data in a concise and meaningful fashion

VI. OTHER IMPORTANT COMPETENCIES ACCOMPLISHED DURING THE PHARM.D. PROGRAM INCLUDES:

____ ____ 1.
____ ____ 2.
____ ____ 3.
____ ____ 4.
____ ____ 5.
OTHER PERFORMANCE STANDARDS

Journal Club

Init.  Date

First journal club presentation

Second journal club presentation

Drug Utilization Project

Init.  Date

Evaluation and/or review
GENERAL POLICIES FOR PHARM.D. STUDENTS

1. Students should contact each preceptor at least one week prior to beginning the rotation. Students should determine when the rotation begins, where to park, where to meet the preceptor, what to bring, and any other general expectations. This is the student’s responsibility.

2. Records bearing patient names or their forms of identification are NOT to be removed from the health care facility. All records should be placed in the appropriate area as designated by the instructor. Students cannot remove the medical record from the unit without permission.

3. All information concerning patients and patient care is to remain confidential. Federal regulation 45CFR Part 160 & Part 164 (collectively HIPAA) prohibits the disclosure of any patient information without the written consent of the person to whom the information pertains.

4. The use of cell phones or other electronic devices is prohibited during case presentations, examinations, journal clubs, any meetings, rounds, or in patient care areas except with the express permission of the preceptor.

5. Students will dress in a professional manner. This includes: for men—shirt, tie, and a clean, white professional jacket; for women—a blouse with slacks or skirt or a dress and a clean, white professional jacket. No jeans, tennis shoes, or sandals! The student's clothing, hair, jewelry, personal hygiene, and the use of fragrances should be appropriate for the professional setting.

6. Students must wear name tags as designated by the site.

7. Questions concerning policies and procedures should be referred to the appropriate administrative/supervisory personnel.

8. The student must get the permission of his/her instructor before making any long distance phone calls that will be charged to the health care facility.

9. All students must have the required liability insurance. In most cases this is provided by the college. The Director of Advanced Pharmacy Practice Experiences or the site will make the student aware if additional insurance is required.

10. Occasionally sites require additional health requirements, background checks, liability insurance or other additional requirements. Completing these additional requirements is the responsibility of the student and is to be completed at the student’s expense.

11. Any student failing to meet any requirements prior to attending the site will not be able to complete that rotation. The student will then make up that rotation during their first available month following the missed rotation (usually December or May) or later at the students request.

12. Students are expected to look up the answers to drug information questions themselves. Personnel in drug information centers are to be used only as a last resort and with the permission of the preceptor. If the student is unsure of his/her response to a drug information request, he/she should review the response with the instructor before replying to the requestor.

13. Students should check with the instructor at each institution regarding that institution's policy for use of patient charts.

14. Before any student makes contact with a patient, he/she must check with the instructor/physician who will then coordinate these activities.
15. Patient interviews should be conducted at times that coincide with optimum patient physical, emotional, and intellectual well-being, taking into consideration patient convenience.

16. No patient education sheets are to be duplicated and given to a patient without the approval of the attending physician/instructor.

17. Affiliation agreements between the College of Pharmacy and the institutions providing clinical APPE experience require that all students in a particular institution comply with the policies that are in effect for its staff.

18. In order to conserve the time of other health professionals, the student will seek out the instructor for advice and answers when questions and problems arise that do not directly affect the patient.

19. The student will devote the necessary amount of time required to complete the rotation objectives and carry out the assigned rotation functions and responsibilities. Generally, this will require a minimum of 40 hours per week at the institution and 10 to 20 hours per week at home. Absences from the institution during regularly scheduled rotation hours should be cleared through the instructor in advance. In the event of unexcused absence, the time must be made up at the discretion of the instructor.

20. The student’s schedule is at the discretion of the preceptor. This may require the student to work outside of the traditional ‘8 to 5’. This may require the student to work evenings, weekends, night shift etc. If the student perceives a conflict this should be addressed before the rotation begins during the initial communication with the preceptor.

21. The lines of communication between the student and his/her instructor should be open at all times. Problems or concerns that the student may have should be addressed early on during the rotation with the instructor of that rotation. However, the student is expected to be sensitive to the instructor’s daily schedule and time commitments. Each instructor has responsibilities not only to the student, but also to his/her institution, practice roles, research projects and the Department of Pharmacy Practice. Blocks of time are often required to fulfill these activities and untimely distractions can adversely affect the instructor’s productivity. It is suggested that the student attempt to schedule specific times to meet with his/her instructor and keep other interruptions to a minimum. Of course, urgent questions and problems should be handled as soon as possible.

22. The lines of communication should remain open between the student and the college through the Director of Advanced Pharmacy Practice experiences, Dr. Megan Kaun. Dr. Kaun encourages all students to bring problems and concerns to her attention as soon as they are identified. In this circumstance they can often be resolved or minimized before the student or preceptor is adversely affected.

23. Students should maintain an appropriate positive, professional attitude throughout the APPE. It is important for the student to realize that his/her actions and words are not only a reflection of the individual, but also of the institution, the program, the College and the University.
APPE LICENSURE CONSIDERATIONS

A current internship license in Ohio is necessary throughout the APPE program. Additionally, a current internship license in the state where the rotation is being performed is required if practicing outside Ohio.

After the completion of rotations the University certifies to any state board of pharmacy that each student will have completed 1500 hours of practical experience. This is sufficient to sit for the board exams in the state of Ohio and many other states. No paperwork is necessary to confirm this 1500 hours. Additional internship hours can be accumulated through the student’s paid internship site. A practical experience affidavit must be submitted by the student each year in order to count additional hours.

CONSIDER ACQUIRING AT LEAST 2000 HOURS SO THAT YOU HAVE ENOUGH EXPERIENCE TO SIT IN ON ANY BOARD EXAMINATION FOR ANY STATE. YOU NEVER KNOW WHERE YOU MAY END UP WORKING.
POLICIES REGARDING TIME OFF DURING APPE ROTATIONS

Due to the intensity of each rotation and the need to guarantee achievement of rotation objectives, it is advised that students avoid taking time away from their rotations. However, it is recognized that students may need time off for personal business, job interviews, or other reasons. The following are the approved guidelines, allowing time off rotations:

1. Students will be allowed up to a total of ten excused days (not including ASHP Midyear Clinical Meeting or a similar professional meeting) away from the APPEs (over 8 rotations).

   The ASHP Midyear Clinical Meeting (MCM) or other professional meeting is considered an important activity in which valuable information is exchanged that benefits clinical pharmacy practice. For the Pharm.D. student in attendance, this meeting provides not only educational experience but also an opportunity to establish personal contacts which may greatly influence professional activity after graduation. In addition, student attendance at the national meeting is consistent with the philosophy of encouraging practitioner involvement in professional associations. Therefore, student requests for absence from an APPE rotation to attend the MCM or other meetings should be distinct from all other absence requests, including those for interview trips, and time away from the institution for this purpose should not have to be made up. Rotation objectives may have to be modified to accommodate the shortened "on-site" tenure. It is not unreasonable, however, for the APPE instructor to request that a report be provided by the student on specific meeting activities to be shared with the staff upon return from the MCM.

2. No more than three days of approved absence during a single rotation may be requested. If these guidelines are exceeded, the instructor may take appropriate measures to insure achievement of objectives. Absence from the APPE site does not relieve the student of any of the rotation objectives or responsibilities.

3. Time off is to be taken only with the prior approval of the instructors at the site. The student should use the "Request for Approval of Absence from APPE Activities Form" (see page 16) to facilitate this approval. This is to be completed online using the EMS website. Time off for weddings, honeymoons and/or special vacations should not be planned during APPE.

4. No more than four days of absence due to illness will be allowed over the APPE period. If more time for illness is required, then the instructor will have the authority to take away from the maximum allotted leave time and/or special form of make-up.

5. Exceptional circumstances and extended illnesses will be reviewed by the instructor and the Director of Advanced Pharmacy Practice Experiences.

6. Primary responsibility for keeping track of time off will rest with each student. The student is required to complete a "Request for Approval of Absence from APPE Activities Form" for each absence from the APPE site, regardless of the reason. This form should be completed online using the EMS software. Any absence taken where a form is not filled out within 5 business days of the absence is considered academic dishonesty and will be dealt with according to the academic dishonesty policy outlined in the student handbook. This may result in failure of the rotation or dismissal from the APPE program.
7. Unexcused absences are NOT tolerated and jeopardize the student's successful completion of the program. Individual instructors should immediately contact the Director of Advanced Pharmacy Practice Experiences if such absences occur.

8. Using rotation time or taking time off from rotation to work on the student’s seminar III project is NOT considered appropriate. This would be considered an unexcused absence and/or action subject to dismissal.

9. Time taken from the rotation for travel to/from a distant rotation is to be made up during the rotation at the discretion of the preceptor. Generally no more than 2 days (including weekend days) should be taken for travel.
The University of Toledo College of Pharmacy
REQUEST FOR APPROVAL OF ABSENCE FROM APPE ACTIVITIES

Student __________________________________________________________________________

APPE Site/Rotation ___________________________________________________________________

Number of days of absence included in this request __________________________________________________________________________

Approval is requested for absence from APPE activities on _________/_______/_______ for the reason indicated below.

Approval is requested for absence from APPE activities from _________/_______/_______ through _________/_______/_______ for the reason indicated below.

REASON FOR ABSENCE:

_____ Illness

_____ Other:

_____ Death in Family

_____ Residency Interview

_____ Job Interview

_____ Attend Professional Meeting

_____ Personal Reasons

Further reason for absence can be given here, if explanation is required.

Approval requested _______________________________ _________/_______/_______

(Student) (Date)

Approved _______________________________ _________/_______/_______

(APPE Instructor) (Date)

Received _______________________________ _________/_______/_______

(Director of APPEs) (Date)

This form must be completed on the EMS website
POLICY REGARDING ACCEPTANCE OF
POST-GRADUATE OBLIGATIONS

Encouragement is given to all students to complete the APPE portion of the Pharm.D. Program within the scheduled APPE period. This is a reasonable expectation since appropriate plans must be made for employment/residency/fellowship or other personal post-graduate obligations.

However, it is important for the student to realize and understand that acceptance of a post-APPE position should not be contingent upon the "expected" completion date. Rather, the arrival date for the post-graduation position should be left open in the event additional rotation experience is necessary to complete particular objectives of the Pharm.D. Program.

Although the student should be aware of any individual problems with completing the program in the anticipated time schedule, he/she should consult with the Director of Advanced Pharmacy Practice Experiences and instructors/preceptors to ascertain if potential problems exist. It is the responsibility of the student to monitor his/her progress in the Pharm.D. Program.
EMPLOYMENT DURING APPE

The APPEs are an intense clinical experience requiring the full attention of the student who enters this phase of professional development. Employment during APPE has several advantages and limitations for the Doctor of Pharmacy student. If the student is employed in a professional environment such as a pharmacy or laboratory, these activities may contribute to the student's overall growth and development. Likewise, the student may work in an environment in which he/she intends to remain following graduation. This unique situation can provide the student with clear program objectives and direction.

More frequently, however, students enter a part-time position during the APPEs at a local retail or hospital pharmacy intent on earning enough money to pay for personal needs such as rent, food, or books. Responsibilities during APPEs are usually manageable in conjunction with outside work activities since most students realize their time limitations.

Despite initial good intentions, some students exceed their personal limitations and find themselves "burning a candle at both ends." This unfortunate situation may develop into an inability to meet APPE rotation, site specific, or general program objectives. It should be clear that working is not an acceptable excuse for not completing assignments, objectives, and/or competencies on time. As a result the student may not pass individual rotations or improve throughout the entire APPEs (failure of general APPE objectives).

Therefore, the long-term consequences of employment must be carefully considered by each individual student. If the student decides to work during APPEs and a conflict occurs, he/she must quickly evaluate career goals to determine the most acceptable path.

The clinical instructors request that working students consider the following points:

1. Graduation from the Doctor of Pharmacy program depends on the successful completion of the assigned individual APPE rotation objectives, as well as site specific, and general objectives.

2. The APPE rotation and site assignments differ for each student. As a consequence, the intensity and obligations of individual rotations may differ.

3. Some instructors may require an evening / weekend service commitment, weekend rounds, or night call.

4. APPE instructors and the student's advisor are available to students who have questions about rotation requirements.

5. If a student believes he/she must work and the rotation responsibilities permit employment, selection of a position in a professional pharmacy or related area is encouraged.
APPE DISMISSAL POLICY

Pharmacy students may be dismissed from an APPE site at any time during the rotation by the APPE site, preceptor or Director of Advanced Pharmacy Practice Experiences through the initiation of the Dismissal Procedure described below.

ACTIONS WHICH ARE SUBJECT TO DISMISSAL

Circumstances or actions under which APPE students may be dismissed using the Dismissal Procedure described below:

- Failure to adhere to APPE site policy and/or procedure
- Failure to adhere to UT APPE program policy and/or procedure
- Failure to meet a UT APPE program requirement
- Blatantly unacceptable or continuously unacceptable APPE program performance
- Mistreatment of The University of Toledo and/or APPE site employees
- The performance of an action which is detrimental to the care of a patient
- The performance of an action which is detrimental to the clinical service provided by the site and/or preceptor

DISMISSAL PROCEDURE

When a circumstance or action occurs which is determined to be grounds for dismissal, the APPE preceptor will inform the student and Director of Advanced Pharmacy Practice Experiences of the situation. The situation will then be handled as follows:

a) If the situation is related to: failure to meet a requirement, failure to follow policy or procedure, improper behavior, or inadequate APPE performance, the student will be given a specific outline by the APPE preceptor as to how his/her performance must improve and/or meet expectations within five (5) class days. A copy of this outline will be sent to the Director of Advanced Pharmacy Practice Experiences. If after five (5) class days such performance has not been achieved, the student will be removed from the APPE site and will receive either a grade of "U" or "I" on their transcripts as determined by the Director of Advanced Pharmacy Practice Experiences. In the event that 5 class days do not remain in the month the situation will be evaluated by the preceptor and the Director of APPEs and each case will be handled individually.

b) If the situation is related to an action that is detrimental to patient care and/or to the clinical service, upon discussion of the situation between the APPE preceptor and Director of Advanced Pharmacy Practice Experiences, the student shall be subject to immediate removal from the APPE site and shall receive a grade of "U."

If a student has any question over the handling of his/her dismissal procedure by the Director of Advanced Pharmacy Practice Experiences and/or preceptor, he/she should contact the Pharmacy Practice Department chairman, Dr. Steven Martin.
Academic Performance Policy
For Doctor of Pharmacy APPE Students

Any student who fails to pass a single APPE rotation or is dismissed from a single APPE rotation (for reasons other than an action detrimental to patient care and/or to the clinical service, see below) will be placed on academic probation immediately upon completion or dismissal from the rotation. The student will continue on academic probation for the duration of his/her APPE rotation experience.

Any student on probation who fails to pass an APPE rotation or is dismissed from an APPE rotation will be immediately removed from the APPE program, receive a record review by the Academic Performance Committee, and be subject to dismissal from the Doctor of Pharmacy program. All previously scheduled APPE sites will become available for other APPE students.

If the situation leading to the dismissal of a student from an APPE rotation is related to an action that is detrimental to patient care and/or the clinical service, the student will be immediately removed from the APPE program. The Academic Performance Committee and/or the College Professionalism Committee will review the situation and the student may be subject to dismissal from the Doctor of Pharmacy program. All previously scheduled APPE sites will become available for other APPE students.

Actions that are subject to dismissal are outlined in the APPE Dismissal Policy.

STUDENT APPEAL OF APPE GRADE ASSIGNMENT

A student may appeal the grade assigned in the Doctor of Pharmacy APPE, according to the procedures outlined by University regulations and the Student Handbook of the College of Pharmacy. These regulations require that appeals be pursued on an informal basis at the lowest possible level before submission of an appeal to the College and/or University grade appeals committee. The regulations encourage the establishment of an informal process at the department level to meet this requirement. As such, this appeals procedure has been developed.

1. If a student feels that a rotation or the overall grade for the APPE has been assigned as a result of prejudice, caprice or other improper conditions, or inconsistently with those assigned other students concurrently on APPE, the student may appeal that grade.

2. The appeals process should be initiated by a meeting between the student and the faculty member or APPE preceptor responsible for the evaluation in question. The student should have in written form an outline of the basis for appeal (prejudice, caprice, improper conditions, inconsistency). The meeting should be scheduled no later than two weeks after the grade in question has been assigned.

3. Failure of the instructor responsible for the evaluation in question to attend this meeting without mutual consent of the parties involved defaults the process to the next step. Failure of the student to attend the meeting ends the appeals process.

4. If no satisfaction is obtained through this meeting, the next step in the appeals process should be pursued.

5. The student should prepare a written document addressed to the Chairman of the Department of Pharmacy Practice specifying the basis for the appeal and identifying the attempts to resolve the problem with the instructor. This document will be distributed to the members of the APPE grade appeals committee and taken under advisement by that group. The committee may meet with the student and/or the instructor responsible for the evaluation in question separately or together to resolve any unclear issues and to establish certain facts. The committee will meet in closed session to render its decision. The decision
will be made known to both parties in written form within one week of the meeting. The decision by the committee may take the form of a specific grade assignment and/or may include recommendations appropriate to rectifying the situation.

6. If the student or the APPE instructor elects to appeal the decision of this committee, the appeal should follow the procedures outlined in the Student Handbook of the College of Pharmacy and by University regulation.
The University of Toledo College of Pharmacy

APPE CONFIDENTIALITY STATEMENT
2009 – 2010 ACADEMIC YEAR

As a Pharm.D. University of Toledo College of Pharmacy student, I agree to protect the confidentiality of patient information in accordance with the following requirements:

1. **I WILL:**
   - avoid any inappropriate disclosure of confidential patient information as outlined on the back of this document
   - use confidential files and data only for purposes for which I have been specifically authorized by my supervisor
   - immediately report any unauthorized access or use of confidential patient information to my supervisor

2. **I WILL NOT:**
   - share confidential patient information with anyone unless the information is required for patient care, research and/or educational purposes; and in such cases, the patient's name won't be used unless entirely necessary
   - review and/or access patient information for which I have no authorization
   - make copies of any confidential patient records or data except as specifically authorized by my supervisor; and in such cases, the patient's names will be removed
   - share my computer password or file access codes with anyone, if assigned to me
   - allow unauthorized personnel access to files, computers, records and/or other confidential patient information

I understand that information pertaining to the patient's admission, diagnosis, treatment and financial status is confidential and must be protected. I understand that any misuse of confidential patient information, whether intentional or due to neglect on my part, will result in appropriate, corrective disciplinary action, up to and including removal from The University of Toledo College of Pharmacy program.

________________________________________  _______________________
Student Signature                      Date
CONFIDENTIALITY OF PATIENT INFORMATION POLICY

It is the policy of The University of Toledo College of Pharmacy that all Pharm.D. APPE students have a legal and ethical duty to respect, protect and maintain the patient's right to confidentiality. Information pertaining to the patient's admission, diagnosis, treatment and financial status is confidential and must be protected. The University of Toledo College of Pharmacy is committed to ensuring the protection and appropriate use of all confidential patient information. Any violation of patient confidentiality will result in appropriate, corrective disciplinary action, up to and including termination from The University of Toledo College of Pharmacy program.

Purpose

To uphold the patient's right to confidentiality and to respect the privacy of patients.

Procedure

1. All patient information is confidential and must be safeguarded. Confidential patient information includes: medical records; patient information stored in computerized data bases; patient census list; operating room schedules; and admission, discharge and transfer lists.

2. Patient information maintained for the purpose of measuring, assessing and improving the quality of patient care and practitioner performance is also confidential.

3. Students may share confidential patient information with other health care providers only if the information is required for patient care, research and/or educational purposes. The use of the patient's name should not be used in such situations, unless entirely necessary.

4. Maintaining the patient's right to confidentiality includes selecting private settings to conduct patient interviews and refraining from discussing patient information in public areas (i.e., stairwells, hallways, elevators, restrooms).

5. The University of Toledo College of Pharmacy considers a breach of patient's confidentiality as a serious infraction. Violation of this policy will result in appropriate, corrective disciplinary action, up to and including termination from The University of Toledo College of Pharmacy program.
PHARM.D. APPE EVALUATION FORMS

REQUIRED FORMS

These forms must be submitted on the EMS website in order for a grade to be assigned

Weekly Student Performance Evaluation

This is the form your preceptor will use each month to evaluate your performance. Your preceptor should give you feedback at least twice during the month. It will also be your responsibility to assure that the form is completed by the preceptor at the end of the month. Credit cannot be given for your APPE until this form is submitted on the EMS website.

APPE Instruction Evaluation Form

This is the form you should use at the end of the month to evaluate your APPE site. Credit cannot be given for your APPE until this form is submitted on the EMS website. It is your choice whether or not to directly share this information with your preceptor, although you are strongly encouraged to do so as the evaluation can be viewed by the preceptor after submission. The student is encouraged to provide constructive, professional feedback to the preceptor. This information is taken seriously by the preceptor and by the Director of APPEs and is used to improve the experience for future students.

OPTIONAL FORMS

These forms are to be used at the discretion of the preceptor

Case Presentation Evaluation Form

Most APPE sites will require you to give verbal presentations. This is a representative copy of the evaluation form your preceptor may choose to use.

Oral Examination Evaluation Form

Some APPE sites require you to participate in an oral examination at the end of your rotation. This is a representative copy of the evaluation form your preceptor may choose to use.
WEEKLY STUDENT PERFORMANCE EVALUATION

Student: ___________________________ Instructor: ___________________________
Rotation: __________________________ Dates: ___________________________

The following scale should be used to evaluate the parameters listed below ["expectations" are defined as what you would expect from the student at the end of the rotation given the student's previous APPE experience].

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Significantly exceeds expectations</td>
</tr>
<tr>
<td>2</td>
<td>Meets performance expectations</td>
</tr>
<tr>
<td>1</td>
<td>Below expectations; Improvement needed</td>
</tr>
</tbody>
</table>

NOTE: For successful completion of the rotation, the "Final Score" should be “2” or greater with no evaluation parameter rated lower than "1" by Week 4. Performance level of "1" dictates immediate analysis for remediation of weaknesses. N/A = not applicable

A. Patient Monitoring Skill Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>MIDPOINT</th>
<th>WEEK 4</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Appropriately identifies real and/or potential drug therapy problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Appropriately demonstrates an ability to pursue new or alternative solutions to problems and make suggestions for improving patient care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Demonstrates knowledge of disease states appropriate for this clinical setting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Demonstrates knowledge of drug therapy appropriate for this clinical setting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Constructs sound pharmacotherapeutic plans to resolve/avert drug therapy problems, especially in the absence of detailed instruction and/or supervision</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Appropriately assesses and monitors patient status and response to therapy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Appropriately applies pharmacokinetic and/or other parameters to derive dosing recommendations</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### B. Use of Resources Parameters

<table>
<thead>
<tr>
<th></th>
<th>MIDPOINT</th>
<th>WEEK 4</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Effectively uses drug/medical literature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Effectively utilizes his/her time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Demonstrates the ability to initiate, organize and complete projects and assignments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Appropriately follows through on assigned tasks in a neat and accurate manner</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### C. Communication Skills with Patients

<table>
<thead>
<tr>
<th></th>
<th>MIDPOINT</th>
<th>WEEK 4</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Effective oral communication skills with patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Effective written communication skills with patients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Demonstrates a willingness to form an opinion and express observations and/or ask questions appropriately</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### D. Communication Skills with Other Healthcare Professionals

<table>
<thead>
<tr>
<th></th>
<th>MIDPOINT</th>
<th>WEEK 4</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Effective oral communication skills with other health care professionals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Effective written communication skills with other health care professionals</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Demonstrates a willingness to form an opinion and express observations and/or ask questions appropriately

E. Professional Growth Parameter (Yes or No)  
   1. Exhibits continued improvement in pharmacotherapeutic knowledge and patient monitoring skills

F. Professional Responsibility Parameters (Yes or No)  
   1. Present and prepared for all APPE activities
   2. Conducts him/herself in a professional manner
   3. Demonstrates personal characteristics for a favorable impression at the clinical site
   4. Demonstrates the ability to establish effective relationships with other health care professionals
   5. Punctual and prepared to discuss patients and/or assigned topics with the preceptor

FINAL SCORE (Arithmetical average of the above evaluated parameters)

INITIAL ASSESSMENT: (Evaluate student on basis of initiative, preparedness, motivation, time management and understanding of basic monitoring skills)
WRITTEN COMMENTARY

MIDPOINT ASSESSMENT:

WEEK 3 ASSESSMENT (AS NEEDED):

WEEK 4 ASSESSMENT:
END OF APPE REPORT

PRESENTATION(S)
Title: ___________________________ Audience: ___________________________
Title: ___________________________ Audience: ___________________________
Evaluation

PROJECT(S)
Topic ___________________________ Audience: ___________________________
Topic ___________________________ Audience: ___________________________
Evaluation

EXAMINATION(S)
Topic: ___________________________ Date: ___________ Score: ___________
Topic: ___________________________ Date: ___________ Score: ___________

SUMMARY STATEMENT
Identify Improvements over the rotation:
Identify areas in need of improvement for subsequent rotations:

After reviewing the student's overall performance, it is my opinion that the student

DID NOT PASS / PASSED this rotation.

If you feel that this student performed exceptionally well on this rotation, above and beyond normal expectations and you wish to pass this student with honors, please provide written commentary supporting your decision to pass with honors.

Instructor's signature: ______________________________  Date: _________________

Student's signature: ______________________________  Date: _________________

NOTE:
1. The student's signature above only indicates that the instructor has reviewed this document with the student. A student may appeal the overall performance evaluation above using the procedures identified in the APPE manual.

2. This form is to be completed on the EMS Website
The University of Toledo  
Doctor of Pharmacy Program  
Clinical APPE

APPE INSTRUCTION EVALUATION FORM

Student Name: ____________________________ APPE Site: ____________________________

APPE Instructor: ____________________________ Month/Year ____________

Please read each statement carefully, then select the alternative that best corresponds with your evaluation of the statement - such that:


Orientation to the rotation - My instructor:
1. Adequately oriented me to the APPE site .............................................. SA A N D SD
2. Clearly identified the goals of the rotation, the performance expectations and the approach to evaluation.............................................. SA A N D SD
3. Appropriately oriented me to each new activity and/or experience .............................................. SA A N D SD

Completion of Objectives
1. The APPE site provided sufficient opportunity for me to meet all of the core experience objectives (if applicable)  
   1a. If D or SD circled for above, explain on backside......................................................... SA A N D SD
2. The APPE site provided sufficient opportunity for me to meet all of the site-specific rotation objectives .............................................. SA A N D SD
3. Resources were readily available on site to complete the rotation objectives ...................... SA A N D SD
4. The instructor was sufficiently present and/or accessible to facilitate attainment................................................................. SA A N D SD
5. Estimated total number of contact hrs/wk with instructor ............................................................ hr/wk

Fostering independent practice - My instructor:
1. Demonstrated the integration of didactic knowledge into practice................................................................. SA A N D SD
2. Provided sufficient experience opportunities to foster my independence .............................................. SA A N D SD

As a mentor - My instructor:
1. Regularly and in a timely manner informed me of my overall progress .............................................. SA A N D SD
2. Was able to recognize my knowledge and performance weaknesses .............................................. SA A N D SD
3. Was aware and could interpret my concerns and frustrations......................................................... SA A N D SD
4. Worked with me to enhance my strengths and fortify areas of weakness .............................................. SA A N D SD
5. Provided an environment conducive to education and training ......................................................... SA A N D SD

Overall - My instructor:
1. Motivated me to do my best work......................................................... SA A N D SD
2. Was able to assist in my career development ......................................................... SA A N D SD
In the spaces provided below, please identify the primary strengths and weaknesses of the rotation site and the instructor/instruction, and where applicable, factors that might have enhanced your experience [particularly helpful where "D" or "SD" responses were given to evaluation statements]:

Site Strengths:

Site Weaknesses:

Strengths of Instructor:

Areas where instructor can be of greater assistance:

Suggestions for Enhancement:

Other Comments

You are encouraged to share this evaluation with your rotation instructor but you are not required to do so. The evaluation will be released to the preceptor after each rotation. Please complete this form on the EMS website.
The University of Toledo  
Doctor of Pharmacy Program  
Clinical APPE Experience  

CASE PRESENTATION  
EVALUATION FORM  

Student: ____________________________  Evaluator: ____________________________  

Topic: ____________________________  Date: ____________________________  

<table>
<thead>
<tr>
<th>1 = improvement mandatory, substantially below performance expectation</th>
<th>2 = improvement needed: below expectations</th>
<th>3 = meets expectations</th>
<th>4 = exceeds expectations</th>
<th>5 = superior: significantly exceeds expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

### Organization/Overall Presentation

- **Relevance of Patient case to disease state topic**: 1 2 3 4 5  
- **Continuity of presentation: patient to disease state topic**: 1 2 3 4 5  
- **Appropriate balance of emphasis: patient to topic**: 1 2 3 4 5  
- **Appropriate utilization of time allotted**: 1 2 3 4 5  

### Organization/Patient Information

- **Logical information sequence**: 1 2 3 4 5  
- **Pertinent data provided**: 1 2 3 4 5  
- **Data/hospital course well delineated**: 1 2 3 4 5  

### Interpretation/Evaluation of Data

- **Thoughtful interpretation of patient data**: 1 2 3 4 5  
- **Sufficient supportive information provided**: 1 2 3 4 5  
- **Thoughtful critique of patient drug therapy**: 1 2 3 4 5  
- **Thorough search of the literature**: 1 2 3 4 5  

### Pharmacotherapeutic Plan Development

- **Pharmacotherapeutic plan identified**: 1 2 3 4 5  
- **Appropriate application of literature to case**: 1 2 3 4 5  
- **Thorough discussion of drug and non-drug alternatives to therapy**: 1 2 3 4 5  
- **Adequate conclusions/summary**: 1 2 3 4 5  

### Verbal Presentation

- **Clear, audible speech**: 1 2 3 4 5  
- **No distracting mannerisms**: 1 2 3 4 5  
- **Good vocal emphasis**: 1 2 3 4 5  
- **Eye contact with audience**: 1 2 3 4 5  
- **Ability to handle questions**: 1 2 3 4 5  
- **Clear explanation/articulation of concepts**: 1 2 3 4 5  

### Visual Aids/Handouts

- **Thorough, well organized**: 1 2 3 4 5  
- **Clear and legible**: 1 2 3 4 5  
- **Complemented the presentation**: 1 2 3 4 5  
- **References in correct format and complete**: 1 2 3 4 5  

---

Pharm.D. APPE Manual  
Rev. Sept. 2008
CASE PRESENTATION EVALUATION FORM
Page 2

Comments and Suggestions for Improvement:

Overall Evaluation:

In consideration of the above evaluation, I feel the student PASSED / DID NOT PASS this case presentation.
The University of Toledo  
Doctor of Pharmacy Program  
APPE Experience

### ORAL EXAMINATION EVALUATION FORM  
To Be Retained by Student

<table>
<thead>
<tr>
<th>Student:</th>
<th>Rotation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluator:</td>
<td>Exam Date:</td>
</tr>
</tbody>
</table>

### Problem Identification

| a. Disease related problems | 1 2 3 4 5 NA |
| b. Drug related problems | 1 2 3 4 5 NA |
| c. Identifies data needed to further clarify and monitor potential problems | 1 2 3 4 5 NA |

### Problem Resolution, Therapeutic Plan and Follow-up

| a. Discuss magnitude of each problem and comments on any therapeutic options | 1 2 3 4 5 NA |
| b. Discusses specific recommendations to resolve problems and optimize drug therapy | 1 2 3 4 5 NA |
| c. Commits to specific drug(s) of choice and rational therapy for each problem | 1 2 3 4 5 NA |
| d. Develops safe drug and dosage regimens | 1 2 3 4 5 NA |
| e. Discusses any patient/family/social factors which may affect therapy | 1 2 3 4 5 NA |
| f. Identifies appropriate therapeutic outcomes and monitoring parameters | 1 2 3 4 5 NA |
| g. States ADR/toxicities for specific drugs and selects appropriate monitoring parameters | 1 2 3 4 5 NA |

### General Knowledge

| a. Disease states | 1 2 3 4 5 NA |
| b. Drug therapy | 1 2 3 4 5 NA |
| c. Drug products | 1 2 3 4 5 NA |
| d. Responses to questions | 1 2 3 4 5 NA |
| e. Overall depth of knowledge | 1 2 3 4 5 NA |

### Communication Skills

| a. Presents information concisely, with authority, in an organized manner | 1 2 3 4 5 NA |
| b. Responds to questions well, in a logical and organized manner | 1 2 3 4 5 NA |
| c. Displays confidence in responses; admits when uncertain/does not know | 1 2 3 4 5 NA |
After reviewing the student's overall performance, it is my opinion that the student **Passed** / Did **Not Pass** this oral examination.

**Evaluator's Signature:** ________________________________

---

**KEY**

1 = Improvement mandatory: substantially below performance expectation - Fails to demonstrate a satisfactory level of knowledge, skills, and understanding of the covered material; area needs significant improvement.

2 = Improvement needed: below expectation - Demonstrates a below average level of knowledge, skills, and understanding of the covered material; area needs some improvement.

3 = Meets expectations - Demonstrates a satisfactory level of knowledge, skills and understanding of the covered material; continued improvement is encouraged.

4 = Exceeds expectations - Demonstrates an above average level of knowledge, skills and understanding of the covered material.

5 = Superior: significantly exceeds expectations - Demonstrated a near perfect level of knowledge, skills, and understanding of the covered material; could serve as a model for this area.

NA = Not Applicable
PHARM.D. STUDENT INDIVIDUAL PERFORMANCE NOTEBOOK *

Each student shall prepare a notebook which contains the following:

1. Copies of Weekly Student Performance Evaluations from past preceptors

2. The Skill-Based Competency Sheets for preceptors to initial

3. Any other student evaluation or information that would assist future preceptors in instructing the Pharm.D. student more efficiently

4. Special projects or presentations completed during a given rotation

5. A copy of the students most current CV

6. A copy of the handout and slides from the students seminar III project

This notebook shall be given to the student's preceptor on the first day of the rotation. The preceptor should give the notebook back to the student by the last day of the APPE rotation.

This notebook will be reviewed by the Director of Advanced Pharmacy Practice Experiences during the exit interview process. The student must present this completed notebook in order for the student to receive a grade for the final APPE rotation.

* Subject to change based on the implementation of an electronic portfolio system. Information TBA
EXIT INTERVIEWS*

Each student will be required to come to the college to complete an exit interview before graduation. This process will assist the college to improve its’ program, curriculum and the experiential program.

The student’s completed individual performance notebook will be reviewed at this time. The student must complete this interview before the final APPE grade is submitted to the registrar.

* Subject to change based on the implementation of an electronic portfolio system. Information TBA

POLICY REGARDING OUT-OF-SYNC STUDENTS

For each out-of-sync student, the process for assigning rotations will be handled on an individual basis by the Director of Advanced Pharmacy Practice Experiences. The student must be on track to begin rotations in the following August in order to participate in the selection process. It is strongly suggested that any student who is out-of-sync contacts the Director of Advanced Pharmacy Practice Experiences individually at the time they become out-of-sync. Students must complete APPE’s in the semester in which they are registered.

INTERNATIONAL STUDENTS

A social security number will be required in order for you to receive an intern license in most states, including Ohio. It is strongly suggested that you obtain a social security number as soon as possible to prevent any problems with beginning rotations. An active intern license is required to begin rotations. Please work with the international student office on campus to obtain this number.

POSITIVE BACKGROUND CHECKS

Positive finding or “hit” on background checks will be handled on a case by case basis. The findings will be reviewed and the student will be contacted and given a chance to provide a written explanation. Results of such action may delay or prevent graduation from the program. Once the case is reviewed, the student will be allowed to participate in rotations at the discretion of the Director of APPE’s. Depending on the circumstance, each preceptor may be informed that the student had a “hit” on his/her criminal background check. Each site will then have the right to accept or refuse the student. Should the site refuse to accept the student the Director of APPEs will make their best effort to find an alternative rotation, but the student should be aware that acceptance is not guaranteed.

It would be in the best interest of the student to contact the Director of Advanced Pharmacy Practice Experiences prior to receiving a background check if a positive hit is expected.
PHARM.D. APPE ROTATION HELPFUL HINTS AND NOTES

The following suggestions are in response to questions and issues that have been raised by previous Pharm.D. students.

1. Approximately 1-2 weeks prior to each of your rotations, contact your next preceptor to obtain such information as:

   - What day you start
   - Where you meet
   - Where you park
   - What you should wear (especially with respect to lab coats)
   - If you need to wear a patch on your lab coat (if so, where)
   - What you need to bring with you
   - When you generally are expected to arrive and leave each day
   - What evening, weekend, or holiday commitments you would have
   - What your options are for lunch (dinner and bedtime snack)

2. Rotations will generally start on the first calendar day of the month and end on the last calendar day of the month. In most instances, if a month starts on a holiday or weekend, your first day will be the subsequent first "business" day of the month; and, if the month ends on a holiday or weekend, your last day will be the last "business" day of the month. However, do not assume this will always be the case and confirm starting dates and ending dates with your preceptor.

3. If the month changes mid-week and your new rotation requires you to live in a different area code, you will need to make arrangements with one of your preceptors so that time can be made to allow you to travel to your new site. The actual handling of the situation will depend on each situation. One general suggestion I would like to make is to look at the calendar. If the first day of the new rotation is on a Friday, ask the preceptor of your newer rotation if you could start on the following Monday. If the last day of your old rotation is on a Monday, ask the preceptor of the older rotation if the last day of your rotation could be the preceding Friday. For other scenarios, I've found leaving the older site one day earlier and starting the newer site on the first of the month works best.

4. Whether you are responsible for APPE on holidays is up to the preceptor you have during that particular month. Do not assume anything (such as you will have the Friday after Thanksgiving off) without talking to your preceptor. Generally, discussing these items at the beginning of the month will avoid any conflicts.

5. Realize that your APPE rotation commitments take priority over any outside employment commitments, even during evenings. In addition, in some instances, this may include weekends or holidays.

6. If you see a potential conflict occurring, make arrangements with your preceptor as soon as possible.

7. You will be attending and giving seminar Presentations during the Fall and Spring Semester. Attendance to these seminars is mandatory for APPE students. Please notify your preceptors of this commitment. This is not considered an absence from rotation.
8. Failure to submit all evaluations on the EMS website by the prescribed deadlines may delay graduation and/or taking the licensure examination.

9. Please keep in contact with the College on course registration procedures. Please update addresses and phone numbers on the EMS website throughout the year. It is extremely important that the college be able to contact you immediately at any time. Students MUST check their UT e-mail daily while on rotations. Important information is provided via e-mail throughout the year.

10. Pharm.D. students are not given time off for “Fall Break” or “Spring Break.”

11. If you are interested in attending the ACCP Annual Meeting (October 2009), you need to obtain permission from your October preceptor.

12. The ASHP Mid-Year Meeting is December 6-10, 2009, in Las Vegas, NV.

13. You will need to apply for graduation in January or February 2010 for the Spring commencement. Specific date has not been provided to us at this time. Everyone who is graduating must apply even if you are not attending the ceremony.

14. On Graduation Day, you will receive a Doctoral Hood during the campus-wide ceremony. You are also entitled to wear a Doctoral Gown. Details on renting or purchasing these items will be given at a later date.

15. Remember - Your APPE manual has many specific policy and procedure details. You are responsible for knowing and abiding by these policies and procedures.

16. If a student requests to change or cancel a rotation after the specified deadline for rotation changes this request will be considered by the director of APPEs. If the request is granted, the rotation will be cancelled and the student will not complete a rotation during that month. The student can make up the rotation in the first available month after the end of the remaining APPEs.

17. The student is responsible for travel, housing, transportation and all other necessary resources required to complete rotations. Failure to secure any of the above will result in the rotation being cancelled. The student will then complete that rotation during the first available month at the end of the remaining APPEs.

18. Communication is the key to success during APPEs. This includes communication with your preceptor, other members of the health care team as well as with the college. Addressing problems/concerns early on can prevent serious problems later on. The Director of Advanced Pharmacy Practice Experiences, Dr. Megan Kaun, is available to address concerns at any time. She can be reached by e-mail, office phone and by cell phone. megan.kaun@utoledo.edu Office Phone 419-530-2529 Cell Phone 419-360-5437

Dr. Kaun requests that students not call her cell phone during non business hours unless the problem/question cannot wait until the next business day
POLICY REGARDING PHARM.D. STUDENT RESEARCH INVOLVING HUMANS

Any Pharm.D. student: 1) who is a principle, co-principle, or co-investigator of a research project involving humans under the auspices of The University of Toledo; 2) who is involved in a research project involving humans where the results will be used in some manner to complete the requirements of receiving The University of Toledo Pharm.D. Program; or, 3) whose efforts in a research project involving humans will be recognized and that the official recognition will indicate that the individual is a student of The University of Toledo, will need to have the research project approved by The University of Toledo's Human Subjects Research Committee.

This policy is not intended to prevent Pharm.D. students from being involved in data gathering for an ongoing research project involving humans for their preceptors at an institution while they are APPE students at that particular institution.

This policy is not intended to prevent students from being involved in research projects involving humans when their involvement is kept separate from any connections with The University of Toledo or their involvement is not recognized as an academic obligation of The University of Toledo.

This policy is not intended to prevent students from being involved in publishing a case report.

Details of the above have been or will be discussed in Introduction to Research Methods [PHPR 6210].
EMS Software

Students will use the EMS software over the course of the APPE sequence for many different functions including:

- Updating student contact information throughout the year
- Accessing preceptor and site contact information
- Viewing student schedules
- Evaluations
- Absence reporting
- Searching/requesting rotations

The EMS website can be accessed with the following link: https://www.ems-webs.com/Toledo

The user will be prompted to login. For first time use the username is the person’s first name and last name separated by a dot and the password is ‘Password’ (case sensitive)

For example:

Login: Sally.student
Password: Password

You will be immediately prompted to change the password. The student is asked to write down and remember their password for future use. If the user forgets their password they must contact Mrs. Kathy Zember to receive this information.
APPENDIX A: ADVANCED HOSPITAL PRACTICE OBJECTIVES

Upon completion of the hospital practice experience, the student will be able to*:

1. **Order Entry**
   a. Utilize the patient profile to assess the current order for:
      i. Patient allergy
      ii. Drug interactions
      iii. Therapeutic duplication
      iv. Potential for adverse effects
   b. For each medication order, assess appropriate:
      i. Indication
      ii. Completeness
      iii. Dose/pharmacokinetics
      iv. Dosage form, if injectable consider:
         1. IV compatibility
         2. Stability
         3. Administration rate
         4. Administration restriction
         5. Reconstitution
         6. Route (IM, Sub-Q, IV)
   c. Become proficient at pharmaceutical calculations
   d. Develop a systematic approach to verifying the accuracy of one’s own entry before final completion of the order
   e. Know when to discontinue and/or restart medications without an order when situations warrant (post-operatively, upon transfer, etc.)

2. **Product Preparation**
   a. Unit dose
      i. Accurately select the appropriate medication
   b. Injectable product preparation
      i. Using aseptic technique and following USP 797 guidelines, competently compound injectable products
   c. Chemotherapy
      i. Use the institution’s policy and procedure to ensure safe handling, preparation, and administration of chemotherapy products
   d. Compounding
      i. Using the concepts of pharmaceutics, appropriately compound products for patient use, differentiating when sterile vs. non-sterile technique is suitable
   e. For all products leaving the pharmacy:
      i. Develop a systematic approach to ensure the five principles of drug delivery:
1. Right drug
2. Right patient
3. Right dose
4. Right time
5. Right route

3. **Clinical Services**
   a. Use pertinent patient information to identify problems, including the following drug related problems, and subsequently recommend medication therapy changes:
      i. A problem of the patient is not being treated or is not maximally being treated
      ii. A medication the patient is receiving is not indicated or is contraindicated
      iii. A problem of the patient is being caused by one of his/her medications
      iv. The patient is not being properly monitored with respect to his/her drug therapy (efficacy, toxicity, pharmacokinetics)
      v. A drug interaction or potential drug interaction exists
      vi. A drug dose or duration of therapy is inappropriate (especially in the presence of hepatic or renal impairment)
      vii. A drug is interfering with or masking the manifestation of a disease or altering the interpretation of a lab test
      viii. A medication is being administered utilizing an inefficient route or dosage form, specifically focusing on IV to oral
      ix. The patient has a medication regimen that is leading to non-compliance
   b. Pharmacokinetic dosing
      i. Become familiar with the institution’s policy and procedure for pharmacokinetic dosing and monitoring

4. **Drug Therapy**
   a. When performing any task in the hospital setting, the student should have a firm understanding of drug therapy. For each drug encountered, be familiar with:
      i. Pharmacology
      ii. Dosing
      iii. Pharmacokinetics
      iv. Routes of administration
      v. Contraindications/precautions
      vi. Adverse drug reactions
      vii. Interactions (drugs, dietary supplements, food, laboratory)
      viii. Monitoring parameters for efficacy and toxicity
      ix. Benefit of therapy versus risk
      x. Cost of treatment

5. **Drug Information Skills**
   a. Use the most appropriate resources to respond to drug information questions in an accurate and timely manner
6. **Administrative/Operational Functions**
   a. Understand the process to meeting and maintaining JCAHO compliance standards
   b. Understand the process to maintain pharmacy operations within local and federal regulations
   c. Participate in a quality assurance project, for example:
      i. DUE/MUE
      ii. Patient safety initiative
      iii. Time study
      iv. Reporting of adverse drug reactions
      v. Reviewing and reporting of medication errors
   d. Understand the process involved for making institutional formulary decisions
   e. Recognize factors that are involved in balancing a departmental budget
   f. Discuss the maintenance of the institution’s adverse drug event reporting process
   g. Attend any interdisciplinary committee meetings deemed appropriate by the preceptor
   h. Review key components of human resource management, including:
      i. Hiring/conducting an interview
      ii. Formal disciplinary procedures/termination
      iii. Staff development

7. **Additional Activities to be Completed**
   a. At least one formal presentation to pharmacists or an interdisciplinary committee from the following list:
      i. Monograph for formulary review
      ii. Journal club
      iii. Patient safety initiative
   b. Pharmacokinetic consults that should be reviewed during the course of the rotation include:
      i. Vancomycin
      ii. Aminoglycosides
      iii. Anticoagulants
      iv. Medication adjustments based on disease state (especially renal and hepatic impairment)

8. **Communication Skills**
   a. Develop the ability to effectively communicate, both in writing and verbally, with the patient as well as with health professionals; specific examples include, but are not limited to:
      i. Medication education and patient discharge counseling
      ii. Concisely communicate responses to drug information requests, either verbally or in writing
      iii. Complete documentation of interventions made
      iv. Effective communication with the heath care team, including:
         1. Conveying the therapeutic plan
         2. Calling attention to unrecognized patient problems
9. **Professionalism**
a. Conduct him/herself in a professional and ethical manner when interacting with patients and health professionals by always:
   i. Demonstrating the ability to initiate, organize, and complete projects and assignments in an accurate and timely manner
   ii. Demonstrating the ability to establish effective relationships with patients and other health professionals
   iii. Arriving on time and prepared for all rotation activities
   iv. Effectively utilizing his/her time
   v. Expressing an appropriate degree of empathy for patients and their families
   vi. Maintaining protected health information in a confidential manner
   vii. Developing the philosophy of a team approach to patient care
   viii. Developing habits consistent with life-long learning

*With the understanding that not all objectives will be met at every site*
APPENDIX B: ADVANCED COMMUNITY PRACTICE OBJECTIVES

Upon completion of the advanced community experience, the student will be able to*:

1. Operations
   a. Develop a systematic approach to ensure the five principles of drug delivery:
      i. Right drug
      ii. Right patient
      iii. Right dose
      iv. Right time
      v. Right route
   b. The student should participate and become proficient at the following activities:
      i. Processing new and refill prescriptions, communicating with physicians and office staff when necessary
      ii. Utilize the patient profile to assess the current prescription for:
          1. Drug interactions
          2. Therapeutic duplication
          3. Patient allergy
          4. Potential for adverse effects
      iii. Third party billing and insurance
          1. Appreciation for third party formularies and limitations
      iv. Final verification of prescription
      v. Ensure that each prescription, as well as pharmacy operations, are in compliance with state and federal regulations
      vi. Compounding
      vii. Pharmaceutical calculations
      viii. Quality control
      ix. Dealing with difficult patients and situations
      x. Working with and understanding the role of technicians
      xi. Fraudulent prescription management
      xii. Inventory management, including controlled substances
      xiii. Gain an understanding of pharmacy automation and central fill procedures when applicable
      xiv. Understand the policies and procedures for the pharmacy or company
          1. Budgeting
          2. Generation of necessary reports
      xv. Review key components of human resource management, including:
          1. Hiring/conducting an interview
          2. Formal disciplinary procedures/termination
          3. Staff development

2. Patient Care (Should be the emphasis of this rotation)
   a. Participate in prospective drug utilization reviews
   b. Participate in counseling patients on prescription, non-prescription, and herbal medications
   c. Assess if the patient is an appropriate candidate for self-care
   d. Design a safe and effective self-care plan that addresses the patient’s health care needs
e. Understand the role of herbal medications in patient management
f. Assist in the selection and educate on the use of durable medical equipment and medical devices
g. Participate in advanced pharmaceutical care services, including:
   i. Screening (lipid, blood pressure, etc.) and immunization clinics
   ii. Medication therapy management programs
   iii. Other health initiatives, for example brown bag seminars
h. Conduct a detailed medication history as the situation warrants
i. Consider the impact of Medicare Part D on community pharmacy practice
j. Upon identification of a drug related problem (see below):
   i. Develop an alternative therapeutic plan
   ii. Appropriately communicate the plan to the physician

3. **Drug Therapy**
   a. The student should have a firm understanding of drug therapy. For each drug encountered, be familiar with:
      1. Pharmacology
      2. Dosing
      3. Pharmacokinetics
      4. Routes of administration and/or dosage form
      5. Contraindications/precautions
      6. Adverse drug reactions
      7. Interactions (drugs, dietary supplements, food, laboratory)
      8. Monitoring parameters for efficacy and toxicity
      9. Benefit of therapy versus risk
     10. Cost of treatment
   b. Analyze each prescription received for any drug related problems that may exist, including:
      i. A problem of the patient is not being treated or is not maximally being treated
      ii. A medication the patient is receiving is not indicated or is contraindicated
      iii. A problem of the patient is being caused by one of his/her medications
     iv. The patient is not being properly monitored with respect to his/her drug therapy (efficacy, toxicity, pharmacokinetics)
    v. A drug interaction or potential drug interaction exists
     vi. A drug dose or duration of therapy is inappropriate (especially in the presence of hepatic or renal impairment)
    vii. A drug is interfering with or masking the manifestation of a disease or altering the interpretation of a lab test
   viii. A medication is being administered utilizing an inefficient route or dosage form
     ix. The patient has a medication regimen that is leading to non-compliance

4. **Drug Information Skills**
   a. Use the most appropriate resources to respond to drug information questions in an accurate and timely manner
5. **Additional Activities to be Completed**
   a. Students are expected to complete at least one project that should result in a written report and/or verbal presentation. Examples include:
      i. Formal case presentation
      ii. Meet with a patient who would benefit from an intensive medication education appointment
      iii. Contribute to patient education material, such as a health and wellness pamphlet or pharmacy-related newsletter

6. **Communication Skills**
   a. Develop the ability to effectively communicate, both in writing and verbally, with the patient as well as with health professionals; specific examples include, but are not limited to:
      i. Concisely communicate responses to drug information requests
      ii. Obtain the necessary information when receiving a prescription from a new patient
      iii. Appropriate documentation of interventions made

7. **Professionalism**
   a. Conduct him/herself in a professional and ethical manner when interacting with patients and health professionals by always:
      i. Demonstrating the ability to initiate, organize, and complete projects and assignments in an accurate and timely manner
      ii. Demonstrating the ability to establish effective relationships with patients and other health professionals
      iii. Arriving on time and prepared for all rotation activities
      iv. Effectively utilizing his/her time
      v. Expressing an appropriate degree of empathy for patients and their families
      vi. Maintaining protected health information in a confidential manner
      vii. Developing the philosophy of a team approach to patient care
      viii. Developing habits consistent with life-long learning

*With the understanding that not all objectives will be met at every site*
APPENDIX C: ADVANCED INPATIENT EXPERIENCE OBJECTIVES

Upon completion of the advanced inpatient experience, the student will be able to*:

1. **Problem Solving Skills**
   b. Data collection – develop a systematic approach to gather, organize, and prioritize pertinent data through:
      i. Utilizing current and past medical records, patient interviewing, and interaction with other health professionals to obtain any or all of the following information:
         1. History & Physical
         2. Medication use (past and current)
         3. Progress notes
         4. Lab values
         5. Tests/procedures
         6. Culture/sensitivity data
      ii. Performing any relevant physical assessments not otherwise available
   c. Development of a problem list – develop a systematic approach to identify and prioritize each of the patient’s problems, including the following drug-related problems:
      i. A problem of the patient is not being treated or is not maximally being treated
      ii. A medication the patient is receiving is not indicated or is contraindicated
      iii. A problem of the patient is being caused by one of his/her medications
      iv. The patient is not being properly monitored with respect to his/her drug therapy (efficacy, toxicity, pharmacokinetics)
      v. A drug interaction or potential drug interaction exists
      vi. A drug dose or duration of therapy is inappropriate (especially in the presence of hepatic or renal impairment)
      vii. A drug is interfering with or masking the manifestation of a disease or altering the interpretation of a lab test
      viii. A medication is being administered utilizing an inefficient route or dosage form
      ix. The patient has a medication regimen that is leading to non-compliance
   d. Development of a Sound Therapeutic Plan
      i. Develop a therapeutic plan that includes:
         1. Therapy
            a. Non-pharmacological
            b. Pharmacological
         2. Goal or endpoint of therapy
         3. Monitoring parameters
      ii. Demonstrate the ability to analyze treatment options (both prescription and non-prescription) for each problem, while taking into account the following:
         1. Pathophysiology of the disorder
         2. Etiology (especially drug-related causes) of the disorder
3. Guidelines of treatment/standard of care
4. Pertinent evaluation of the available literature
5. Benefit of therapy versus risk
6. Cost of treatment
7. Institutional formulary

iii. For each therapeutic option, be able to discuss:
   1. Pharmacology
   2. Dosing
   3. Pharmacokinetics
   4. Routes of administration and/or dosage forms
   5. Contraindications/precautions
   6. Adverse drug reactions
   7. Interactions (drugs, dietary supplements, food, laboratory)
   8. Monitoring parameters for efficacy and toxicity
   9. Other relevant clinical issues related to the medication

e. Reassess the patient problem list daily and adjust the therapeutic plan as necessary

2. **Drug Information Skills**
   a. Use the most appropriate resources to respond to drug information questions from patients and health professionals in an accurate and timely manner

3. **Additional Activities to be Completed**
   a. Students are expected to complete at least one project that should result in a written report and/or verbal presentation. Examples include:
      i. Case presentation
      ii. Journal club
      iii. Healthcare professional educational in-service

4. **Communication Skills**
   a. Develop the ability to effectively communicate, both in writing and verbally, with the patient as well as with health professionals; specific examples include, but are not limited to:
      i. Medication education and patient discharge counseling
      ii. Patient interviewing
      iii. Concise education on selected pharmacotherapeutic topics to health professionals
      iv. Informal case presentations on a routine basis
      v. Formal response to drug information questions
      vi. Complete documentation of interventions made
      vii. Effective communication with the health care team, including:
          1. Conveying the therapeutic plan
          2. Calling attention to unrecognized patient problems

5. **Professionalism**
   a. Conduct him/herself in a professional and ethical manner when interacting with patients and health professionals by always:
      i. Demonstrating the ability to initiate, organize, and complete projects and assignments in an accurate and timely manner
      ii. Demonstrating the ability to establish effective relationships with patients and other health professionals
iii. Arriving on time and prepared for all rotation activities
iv. Effectively utilizing his/her time
v. Expressing an appropriate degree of empathy for patients and their families
vi. Maintaining protected health information in a confidential manner
vii. Developing the philosophy of a team approach to patient care
viii. Developing habits consistent with life-long learning

*With the understanding that not all objectives will be met at every site
APPENDIX D: AMBULATORY CARE EXPERIENCE OBJECTIVES

Upon completion of the ambulatory care experience, the student will be able to*:

1. Direct Patient Care
   a. Participate in the direct care of patients, particularly those with chronic diseases
   b. Data Collection – develop a systematic approach to gather, organize, and prioritize pertinent data through:
      i. Utilizing current and past medical records, patient interviewing, and interaction with other health professionals to obtain any or all of the following information:
         1. History & Physical
         2. Medication use (past and current)
         3. Progress notes
         4. Lab values
         5. Tests/procedures
      ii. Performing any relevant physical assessments not otherwise available
   c. Development of a Problem List – using available information, develop a systematic approach to identify and prioritize patient problems, including the following drug-related problems:
      i. A problem of the patient is not being treated or is not maximally being treated
      ii. A medication the patient is receiving is not indicated or is contraindicated
      iii. A problem of the patient is being caused by one of his/her medications
      iv. The patient is not being properly monitored with respect to his/her drug therapy (efficacy, toxicity, pharmacokinetics)
      v. A drug interaction or potential drug interaction exists
      vi. A drug dose or duration of therapy is inappropriate (especially in the presence of hepatic or renal impairment)
      vii. A drug is interfering with or masking the manifestation of a disease or altering the interpretation of a lab test
      viii. A medication is being administered utilizing an inefficient route or dosage form
      ix. The patient has a medication regimen that is leading to non-compliance
   d. Development of a Sound Therapeutic Plan
      i. Develop a therapeutic plan that includes:
         1. Therapy
            a. Non-pharmacological
            b. Pharmacological
         2. Goal or endpoint of therapy
         3. Monitoring parameters
      ii. Demonstrate the ability to analyze treatment options for each problem identified, while taking into account the following:
1. Pathophysiology of the disorder
2. Etiology (especially drug-related causes) of the disorder
4. Benefit of therapy versus risk
5. Cost of treatment (particularly problems arising from the financial impact of medication therapy on the patient)
6. Patient insurance plan formulary

iii. For each therapeutic option, be able to discuss:
   1. Pharmacology
   2. Dosing
   3. Pharmacokinetics
   4. Routes of administration and/or dosage forms
   5. Contraindications/precautions
   6. Adverse drug reactions
   7. Interactions (drugs, dietary supplements, food, laboratory)
   8. Monitoring parameters for efficacy and toxicity
   9. Other relevant clinical issues related to the medication

e. Identify necessary patient educational measures related to the therapeutic plan
f. Implement the therapeutic, educational, and monitoring plans and execute appropriate follow-up

2. **Drug Information Skills**
a. Use the most appropriate resources to respond to drug information questions from patients and health professionals in an accurate and timely manner

3. **Additional Activities to be Completed**
a. Students are expected to complete at least one project that should result in a written report and/or verbal presentation. Examples include:
   i. Formal case presentation
   ii. Journal club
   iii. Health professional educational in-service
   iv. Patient-centered education
b. Participate in pharmaceutical consults requested by health professionals as they arise; examples include but are not limited to:
   i. Pharmacoeconomic issues
   ii. Compliance counseling
   iii. Chronic disease state management
c. When appropriate, independently prescribe and administer medications under collaborative practice agreements, which may include but are not limited to:
   i. Immunization services
   ii. Pharmacotherapeutic management of chronic disease states
d. Participate in medication therapy management services when applicable
e. Develop the ability to distinguish when a problem falls outside of the scope of pharmaceutical care services, and refer to appropriate provider
f. Understand the role of the pharmacist as an educator in the ambulatory care setting
g. Dispensing of medications, including product samples, when necessary (should be kept to a minimum; less than 10% of the student’s time)
h. Participate in creating guidelines for medication use within the practice
i. Participate in the practice’s drug utilization review process

4. **Communication Skills**
a. Develop the ability to effectively communicate, both in writing and verbally, with the patient as well as with health professionals; specific examples include, but are not limited to:
   i. Medication education and patient counseling
   ii. Patient interviewing
   iii. Concise education on selected pharmacotherapeutic topics to health professionals
   iv. Concisely communicate responses to drug information requests
   v. Complete documentation of interventions made
   vi. Effective communication with the health care team, including:
      1. Conveying the therapeutic plan
      2. Calling attention to unrecognized patient problems

5. **Professionalism**
a. Conduct him/herself in a professional and ethical manner when interacting with patients and health professionals by always:
   i. Demonstrating the ability to initiate, organize, and complete projects and assignments in an accurate and timely manner
   ii. Demonstrating the ability to establish effective relationships with patients and other health professionals
   iii. Arriving on time and prepared for all rotation activities
   iv. Effectively utilizing his/her time
   v. Expressing an appropriate degree of empathy for patients and their families
   vi. Maintaining protected health information in a confidential manner
   vii. Developing the philosophy of a team approach to patient care
   viii. Developing habits consistent with life-long learning

*With the understanding that not all objectives will be met at every site*