



## **Experiential Learning Program (ELP)**

### **Course Numbers & Titles**

Advanced Pharmacy Practice Experience (APPE) 499: Pharmacy Practice Pinnacle

### **Course Manager**

Agnes Ann Feemster, PharmD, BCPS  
20 North Pine Street, S730a  
Baltimore, MD 21201  
Office: (410) 706--7150  
Fax: (410) 706-0988  
Email: [afeemster@rx.umaryland.edu](mailto:afeemster@rx.umaryland.edu)

Experiential Learning Office e-mail: [elp@rx.umaryland.edu](mailto:elp@rx.umaryland.edu)

Experiential Learning Program Website: [www.pharmacy.umaryland.edu](http://www.pharmacy.umaryland.edu) – click on “Preceptors”

### **Credit Hours & Length of Rotation**

1 credit (40 experiential hours); Pinnacle project component is ~ 40 hours and longitudinal up to 20 weeks. **The time spent on the Pinnacle project must be separate and distinct from the minimum 200 scheduled rotation hours.**

### **Eligible Class Standing**

P4

### **Prerequisites**

Students must successfully complete the first three professional years (P1 through P3) and all Introductory Pharmacy Practice Experiences (IPPEs).

### **Catalogue Description**

Pharmacists have had a positive impact on the development, implementation and growth of pharmacy services in a variety of settings. This experiential course builds on the knowledge, skills, and abilities for student pharmacists to demonstrate commitment, professionalism, and project management through work on a scholarly project addressing a pharmacy related research question. Students will participate in a needs assessment, evaluate data, and form appropriate conclusions based on the data analysis.

### **Course Outcomes**

*Upon completion of this experiential course, the student pharmacist will be able to:*

1. Identify a pharmacy related research question.
2. Given an identified topic, define the research question.
3. Given an identified topic, determine the methodology for data collection or project development.
4. Given an identified topic, collect and evaluate data to better understand or expand upon the research question.
5. After data analysis, form conclusions related to the question.
6. Given a preceptor approved topic/ question, prepare and present findings in a written report.
7. Demonstrate acceptable qualities and characteristics of professional behavior for patient and provider communications, appearance and attire, timeliness and commitment, and initiative.

### **Required and/or Recommended Texts/Readings**

Preceptors may require and/or recommend additional readings for their rotations. Students are expected to communicate with the preceptor regarding such requirements prior to the rotation start date.

### **Terminal Performance Outcomes (TPOs)**

TPO 37: Communicate information to health care professionals, patients, and caregivers in a timely and effective manner.

TPO 40: Demonstrate self-awareness, identify self-learning needs, and engage in a process of continual professional development.

TPO 43: Carry out responsibilities in accordance with legal, ethical, social, economic, and professional norms.

### **Required and/or Recommended Equipment**

The School of Pharmacy name badge must be worn during all rotations. Preceptors may require and/or recommend additional equipment for their rotations. Students are expected to communicate with the preceptor regarding such requirements prior to the rotation start date.

While no lab coat is required during the Orientation sessions, “Fred lab attire” is expected throughout.

### **ELP Policies**

Students and preceptors are expected to comply with the ELP Policies and Procedures Manual, posted on the website: [www.pharmacy.umaryland.edu](http://www.pharmacy.umaryland.edu) – click on “Preceptors”

### **Preceptor and Site Criteria**

The preceptor must have a faculty appointment from the University of Maryland School of Pharmacy. The preceptor is assigned to specific course(s) based upon experience, credentials, and roles/responsibilities at the site. The site or practice setting must offer sufficient opportunities for students to meet the course outcomes. The preceptor is encouraged to provide face-to-face feedback for the final evaluation and should assure that the course objectives, including the required hours of participation, were accomplished.

### **Pinnacle Project**

Students will work with preceptors to complete activities and assignments which will enable them to accomplish the course objectives by the end of the rotation.

Preceptors may use a learning contract and rotation calendar to organize the experience, to clearly communicate expectations, and to account for student requirements. **The time spent on the Pinnacle project must be separate and distinct from the minimum 200 scheduled rotation hours.** Students may use the off block or complete the project requirements during the course of one rotation, using additional time (evenings or weekends).

#### Student/Preceptor (Mentor) Assignment

- Students can select either a preceptor with the school or a faculty member. For potential mentors not meeting these criteria, the student should consult with the course manager for approval.
- Students should submit an initial project selection form to ELP for proper assignment to the preceptor via CORE ELMS. After this submission, the student is able to submit the necessary “field encounters” and “requirements” for the course for the preceptor to review and assess.
- Students work with their selected preceptor to discuss potential projects/ proposals, develop additional/specific objectives for the rotation as needed, and determine schedule/timeline for completion of the rotation.
- Students must prepare a written project proposal
- Students and preceptors should meet regularly or as needed to discuss project progress and address any concerns/questions.

#### Documentation of experiential hours and related activities

- Students must keep a log of all experiential hours (e.g., meeting with preceptors and working on project/proposal) throughout and beyond the full-time rotation.
- Students are required to provide documentation as a “Field Encounter” in CORE ELMS.

#### Written report of project

- Students are required to prepare a written report/ abstract summarizing the project and submit it to ELP via the “requirements” portion of CORE ELMS.

#### Poster presentation (optional)

- Students may prepare an abstract and/or poster if deemed suitable by their preceptor at a research day, statewide, or national meeting.



UNIVERSITY of MARYLAND  
SCHOOL OF PHARMACY

APPE 499 Student Pinnacle Project Initial Submission  
*Submit under "requirements" in CORE ELMS*

Name of Student: \_\_\_\_\_

Proposed Preceptor Name: \_\_\_\_\_

Project Site: \_\_\_\_\_

Proposed Project title: \_\_\_\_\_

Proposed Start date: \_\_\_\_\_ Proposed End date: \_\_\_\_\_

**I have read the syllabus and completely understand the requirements for this course**

\_\_\_\_\_ Signature

Proposed Project Description (Typed and no longer than one (1) page please

## Student Assessment and Grading

### Pinnacle Project

The student is assessed by the preceptor on performance and professionalism at the midpoint and at the end of the rotation on CORE ELMS. The midpoint evaluation is NOT be used in the calculation of the student's grade. Within one week of completion of the rotation, the Preceptor Evaluation of Student must be completed on CORE ELMS. Failure to do so may result in an "Incomplete." A copy of the hours logs and final is uploaded by the student as a "field encounter" on CORE ELMS. The student submits a copy of the final abstract on the "requirements" section of CORE ELMS. The student and preceptor should retain a copy of the evaluation.

Completion of the CORE ELMS evaluation by the preceptor attests that the course objectives, including the required hours of participation, were accomplished and that the assessment was discussed.

### ELP Course Orientation Attendance

Attendance at the individual orientation sessions will be determined using a sign in sheet or other electronic equivalent, and participation points will be assigned accordingly.

### Summary Grade for the Pinnacle Project

The grade for the Pinnacle project is assigned based on the ratings earned for all evaluation items on CORE ELMS according to the following criteria. Mid-point evaluations are not be considered as part of the final grade. The professionalism/behavioral items do not contribute toward the letter grade. However, a "significant deficiency" rating on any professionalism/behavioral item at the end of the rotation will result in automatic course failure. **Students also complete an evaluation of self, site and preceptor via CORE ELMS, within one week of completion of the rotation.** If the student fails to complete the evaluation of self, site and preceptor the student is not able to review their final grade for the rotation.

The following rubric will be used to assign a grade for the Pinnacle Project.

Absent	0
Beginning	7.5
Developing	11.9
Intermediate	13.6
Proficient	15.5
Highly Proficient	16.5

**A red box indicates a professionalism failure or incomplete abilities checklist.**

The following rubric will be used to assign a Final letter grade for the Course

**Letter grades will be based on final scores as follows:**

- A**        ≥90-100%
- B**        ≥80-89.999%



<b>C</b>	≥70-79.999%
<b>F</b>	0-69.999%

Please refer to the Academic Affairs policy regarding grade challenges

### Remediation Policy

This course follows academic policies for remediation established by the School of Pharmacy. Please refer to Document Library on CORE ELMS, for School policies or the School's website at: <http://www.pharmacy.umaryland.edu/preceptors/policies.html> (view "Remediation policy")

### **Preceptor Assessment**

The student will complete of the Student Evaluation of Self/Preceptor/Site no later than one week (five business days) following the completion of the project. This evaluation is completed via CORE ELMS

Each summer, preceptors are provided summaries (no student names included) of their evaluations in order for them to improve rotations if more than one student is precepted.



UNIVERSITY of MARYLAND  
SCHOOL OF PHARMACY

APPE 499 Student Time Log

Name of Student: \_\_\_\_\_

Preceptor Name: \_\_\_\_\_

Project title: \_\_\_\_\_

Start date: \_\_\_\_\_ End date: \_\_\_\_\_

Date and Time	Hours Worked	Project Activity	Preceptor Signature

Please submit a copy of this form to your preceptor as a “Field Encounter” on CORE ELMS. Use an additional sheet if necessary, to log all hours.



UNIVERSITY of MARYLAND  
SCHOOL OF PHARMACY

APPE 499 Student Pinnacle Project **ABSTRACT** Submission  
*Submit under "requirements" in CORE ELMS*

Name of Student: \_\_\_\_\_

Pinnacle Project Preceptor Name: \_\_\_\_\_

Project Site: \_\_\_\_\_

Project title: \_\_\_\_\_

Project Start date: \_\_\_\_\_ Project End date: \_\_\_\_\_

Abstract (Typed 11-12 font double spaced and no longer than one (1) page please):

- Abstracts should include the following areas:
  - Project title
  - Objectives
  - Methods
  - Data Evaluation
  - Conclusions





### Additional Pinnacle Project Guidelines

#### Preceptor/project selection

- During a 4<sup>th</sup> year rotation (APPE, APEX, or APPC) work with one preceptor to identify a pharmacy related research question relevant to that site or your preceptor's practice that requires an analysis. The preceptor and project MUST be identified no later than the 6<sup>th</sup> block of rotations (November 1st) in order to allow for adequate time for completion.
- The student's role is to identify the topic, research the topic, determine the methodology to investigate the research question, collect and analyze data related to the issue or question, determine appropriate conclusions related to the findings, create an abstract summarizing your work, and present the findings to your preceptor.
- Potential topics for projects include:
  - Medication use evaluation
  - Developing a therapeutic protocol
  - Participating on a research project
  - Literature review and summary report on a topic
  - Developing staff or patient education
  - Other topics as agreed upon between the student and preceptor

#### Suggested Project Timeline

- This project may be completed during the course of one rotation or can be extended after approval of your preceptor for up to 20 weeks. For example, research projects may take longer than five weeks to complete because additional activities (e.g., Applying for IRB approval, submission of an abstract to a national meeting, etc) may need to be completed.
- **The student and the preceptor must jointly develop the project timeline and agree upon specific deadlines and keep the project within one Credit or 40-45 hours of estimated work.**

#### Abstract development - **Required (Preceptor can provide samples of abstracts)**

- Abstracts should include the following areas:
  - Project title
  - Objectives
  - Methods
  - Data Evaluation
  - Conclusions
  - No longer than 1 page, double spaced 11-12 font
  - Submit on CORE ELMS as a "field encounter" after completion of the project

#### Written paper/Presentation guidelines (if pursued)

- State learning objectives for the presentation/report.
- Target the content and delivery appropriately for the audience.
- Support conclusions and/or recommendations with information provided.
- If required for the presentation, supply a handout that supports the presentation.
- Correctly provide citations/references for all materials.

#### Taking it to the next level

Projects completed may be utilized to submit for presentation at a local, regional or national meeting or can result in publication in a related journal. The student and preceptor should discuss if the project is appropriate for submission either for presentation and publication.

**Evaluating/Rating Student Performance (Enter in CORE ELMS):**

Select the appropriate rating (AB, BG, DV, IN, P, HP, which correspond to Absent, Beginning, Developing, Intermediate, Proficient, and Highly Proficient, respectively) in each column for each item and add comments as needed. Please see the table on the next page for descriptions of each rating.

- Comments are strongly encouraged and must be included for any rating of “AB” for any item.
- The midpoint evaluation tracks student progress, provides formative feedback for students to improve performance, and guides activities for the remainder of rotation.
- If the student’s overall performance at midpoint is deficient (i.e., numerous “AB” and/or “BG” ratings), contact the course manager and/or ELP office.
- Grades will be assigned based on the final evaluation.

**Performance Outcomes Criteria**

The preceptor should evaluate the student at both the mid-point and at the conclusion of the rotation, using the following competency levels and descriptors. Each performance item on the assessment tool, with the exception of professionalism items will be rated using the competency levels of Absent, Beginning, Developing, Intermediate, Proficient, or Highly Proficient. The student may fit into more than one category; please select the competency level using the corresponding examples that best describe the student’s performance at the point of assessment.

	Absent	Beginning	Developing	Intermediate	Proficient	Highly proficient
<b>Awareness</b>	Not aware of how to approach the skill	Aware of the deficiency in the skill and attempts to determine effort required to become competent	Initiates practice of the skill  Not able to consistently perform the skill.  Rarely able to identify or solve problems related to the skill	Familiarity with skill develops through practice  Mostly consistent in identifying or solving problems related to the skill	Consistently demonstrates accurate performance of the skill  Can identify and solve problems related to the skill	Demonstrates skill to a less experienced learner  Takes initiative to identify and solve problems related to the skill  Performance is above graduate level
	Lacks ability to independently complete the skill	Sporadically, but rarely able to perform the skill	Sometimes able to complete this skill	Ability to complete this skill is adequate, but not independent	Able to complete the skill independently	Student is consistently confident and able to complete the skill  Demonstrates excellent depth and breadth of understanding of key content and knowledge and applies consistently



UNIVERSITY of MARYLAND  
SCHOOL OF PHARMACY

<b>Supervision</b>	Requires major supervision to complete the skill	Constant supervision and feedback are required to completed the skill	Supervision and feedback are required but need is decreasing	Supervision needed to mastermajor concepts	Supervision is minimal May seek feedback from preceptor with specific questions about performance	Rarely needs intervention Functions independently Incorporates feedback
	Major mistakes are many when student attempts to complete the skill	Major mistakes are common when student attempts to complete the skill	Major mistakes are limited Minor mistakes occur	No major mistakes Minor mistakes occur	Occasional minor mistakes	Rare minor mistakes
<b>Mistakes</b>	Patient safety is at risk	Unable to self-correct	Unable to self-correct most errors	Able to self-correct		

### **Performance Outcomes Criteria**

This evaluation should be completed by the preceptor at both the mid-point and at the conclusion of the student rotation.

#### **Outcome 1: Identify a pharmacy related research question**

- Define the problem or question and objective(s) in a clear and concise manner

#### **Outcome 2: Given an identified topic, define the research question.**

- Collect pertinent background information.
- Use primary and tertiary references as appropriate
- If necessary, effectively use secondary literature searches to identify primary literature.
- Critically analyze information from multiple sources.
- Appropriately cite/reference the information.

#### **Outcome 3: Given an identified topic, determine the methodology for data collection or project development.**

#### **Outcome 4: Given an identified topic, collect and evaluate data to understand or expand upon the question.**

#### **Outcome 5: After data analysis, form conclusions related to the question and describe the rationale for intervention to address the specific question if appropriate.**

#### **Outcome 6: Given an identified topic, prepare and present findings in a written report.**

Written report must state:

- Project title
- Objectives
- Methods
- Data Evaluation
- Conclusions

#### **Outcome 7: Demonstrate acceptable qualities and characteristics of professional behavior for patient and provider communications, appearance and attire, timeliness and commitment, and initiative.**

- Correctly provide citations/references for all materials.

□

### **Professionalism and Behavior Criteria**

This evaluation should be completed by the preceptor at both the mid-point and at the conclusion of the student rotation. By the end of the rotation, a student must earn “Acceptable” for all five professionalism criteria in order to pass the rotation. These criteria do not count toward the evaluation points for a grade. An “Unacceptable” rating on any professionalism metric at the final evaluation will result in a failure in the course.

- **Altruism:** Student makes an unselfish commitment to serve the best interests of the patient and rotation *via* prioritizing rotation requirements, demonstrating effective



listening skills, interacting with others in a compassionate manner, and developing trusting relationships.

- **Honesty and Integrity:** Student displays honesty and integrity *via* abiding by patient (HIPAA) and student (FERPA) confidentiality requirements, and maintaining academic honesty.
- **Respect for Others:** Student treats others as he/she would want to be treated *via* arriving on time for rotation activities, respecting the feelings, needs, thoughts, and opinions of the preceptor/faculty /colleagues, demonstrating ability to receive constructive feedback, and providing constructive feedback in a respectful and educational manner.
- **Professional Presence:** Student instills trust *via* attending and participating in rotation requirements, dressing appropriately for the rotation, and accepting responsibility for one's own actions.
- **Dedication and Commitment to Excellence:** Student strives for excellence and assume responsibility for his/her learning and professional development *via* adequately preparing for all rotation sessions, embracing responsibility for one's own learning, and actively seeking guidance and mentoring as needed.

**\*\*Preceptors please complete the evaluation on the CORE ELMS tool. Evaluations are due no later than 7 days after the rotation was completed. Students should upload the final project abstract as a "field encounter" on CORE ELMS.\*\***