Experiential Learning Program (ELP)

Course Numbers & Titles
Advanced Pharmacy Practice Experience (APPE) 499: Pharmacy Practice Pinnacle

Course Manager

Toyin Tofade, MS, PharmD, BCPS, CPCC
20 North Pine Street, S730a
Baltimore, MD 21201
Office: (410) 706-1495
Fax: (410) 706-0988
Email: ttofade@rx.umaryland.edu

Fadia T. Shaya, PhD, MPH
Professor and Vice-Chair for Academic Affairs PHSR
University of Maryland School of Pharmacy
220 Arch street, 12th floor, room 01-204
Baltimore, MD 21201
Phone 410-706-5392
Email fshaya@rx.umaryland.edu

Experiential Learning Office e-mail: elp@rx.umaryland.edu
Experiential Learning Program Website: 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 patient care services in a variety of pharmacy settings. This experiential course builds on the knowledge, skills, and abilities for student pharmacists to demonstrate commitment, professionalism and work on projects addressing an area of need in patient care. Student pharmacists will participate in a needs assessment, evaluate population-specific data, and develop potential interventions to address pharmacy practice issues.

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

Revised 4-15-16
1. Identify a specific pharmacy practice issue.

2. Given an identified pharmacy practice issue, conduct a literature search to define the pharmacy practice issue.

3. Given an identified pharmacy practice issue, identify resources and limitations (existing barriers and potential challenges) to address the specific pharmacy practice issue.

4. Given an identified pharmacy practice issue, describe the rationale for intervention to address the specific pharmacy practice issue.

5. Given the rationale for an intervention, develop an implementation plan to address the specific pharmacy practice issue.

6. Given a preceptor approved/identified intervention/topic, prepare and present findings in an oral presentation and/or 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 14: Participate in health education
TPO 15: Participate in health policy decision-making processes related to drug use
TPO 16: Maintain professional competence

**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 – click on “Preceptors”

**Preceptor and Site Criteria**
The preceptor must have a clinical 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.

Student Activities and Assignments

1. **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 utilize a learning contract and rotation calendar to organize the experience, to clearly communicate expectations, and to account for student requirements such as ambulatory clinic, and presentations. **The time spent on the Pinnacle project must be separate and distinct from the minimum 200 scheduled rotation hours.** You may use your 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 on RXPreceptor(CORE ELMS). After this the student will be able to submit the necessary “field encounters” and “requirements” for the course for the preceptor to review and assess.
   - Students will be working 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 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 will 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 will be required to provide documentation when requested.

   **Oral presentation and/or written report of project/proposal**
   - Students are required to prepare and present the approved/identified Project/proposal orally (e.g. at the rotation site) and/or as a written report.

   **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. Abstracts are to be submitted to ELP at the end of course via the “requirements” portion of RXPreceptor.
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
2. ELP Course Orientation
Students are expected to sign an attendance sheet as they attend all experiential course orientations to prepare them for the 4th year experience. A designate on the shady grove campus will submit attendance sheets to Dr Tofade. The schedule is as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Course manager</th>
<th>Approximate Time allotted</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPE 451</td>
<td>Dr. Sera plus 4th yr student</td>
<td>1.5 hr</td>
</tr>
<tr>
<td>APPE 401</td>
<td>Dr. DiPaula</td>
<td>30 min</td>
</tr>
<tr>
<td>APPE 455</td>
<td>Dr. Rochester</td>
<td>30 min</td>
</tr>
<tr>
<td>APPE 453</td>
<td>Dr. Layson-Wolf</td>
<td>30 min</td>
</tr>
<tr>
<td>APPE 499</td>
<td>Dr. Tofade</td>
<td>1 hr</td>
</tr>
<tr>
<td>APPC/APEX/Clinical Track</td>
<td>Dr. Ross</td>
<td>1 hr</td>
</tr>
<tr>
<td>Giving and receiving feedback</td>
<td>Dr. Tofade plus student or resident</td>
<td>1 hr</td>
</tr>
<tr>
<td>Professionalism/Putting your best foot forward</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See the portal for the actual dates in April

Student Assessment and Grading

**Pinnacle Project (75%)**
The student will be assessed by the preceptor on performance and professionalism at the midpoint and at the end of the rotation on RXPreceptor. The midpoint evaluation will 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 RXPreceptor. Failure to do so may result in an “Incomplete.” A copy of the hours log and final project (eg. Written paper and/or oral presentation handout) should be uploaded by the student as a “field encounter” on RXPreceptor. The student should submit a copy of the final abstract on the “requirements” section of RXPreceptor. The student and preceptor should retain a copy of the evaluation.

Completion of the RXPreceptor 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 (25%)**
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 will be assigned based on the ratings earned for all evaluation items on RXPreceptor according to the following criteria. Mid-point evaluations should 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 must also complete an evaluation of self, site and preceptor that should be completed via RXPreceptor, within 1 week of completion of the rotation. If the student fails to complete the evaluation of self, site and preceptor the student will not be able to review their final grade for the rotation.

The following rubric will be used to assign a grade for the pinnacle project.

<table>
<thead>
<tr>
<th>Absent</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning</td>
<td>7.5</td>
</tr>
<tr>
<td>Developing</td>
<td>11.9</td>
</tr>
<tr>
<td>Intermediate</td>
<td>13.6</td>
</tr>
<tr>
<td>Proficient</td>
<td>15.5</td>
</tr>
<tr>
<td>Highly Proficient</td>
<td>16.5</td>
</tr>
</tbody>
</table>

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

Total available points for the pinnacle project is 100

**Summary Grade for Orientation Attendance**
The grade for attendance at orientation will be assigned on RXPreceptor according to the following criteria:

- **Present** - full points
- **Absent** - 0 points

<table>
<thead>
<tr>
<th>Course</th>
<th>Time allotted</th>
<th>Points Allotted</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPE 451</td>
<td>1.5 hr</td>
<td>20</td>
</tr>
<tr>
<td>APPE 401</td>
<td>30 min</td>
<td>7.5</td>
</tr>
<tr>
<td>APPE 455</td>
<td>30 min</td>
<td>5</td>
</tr>
<tr>
<td>APPE 453</td>
<td>30 min</td>
<td>7.5</td>
</tr>
<tr>
<td>APPE 499</td>
<td>1 hr</td>
<td>10</td>
</tr>
<tr>
<td>APPC/APEX/Clinical Track</td>
<td>1 hr</td>
<td>25</td>
</tr>
<tr>
<td>Professionalism</td>
<td>1 hr</td>
<td>25</td>
</tr>
</tbody>
</table>

Total available points for Orientation Attendance is 100

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%
- **C**  ≥70-79.999%
- **F**  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 RXPreceptor, for School policies or the School’s website at: [http://www.pharmacy.umaryland.edu/preceptors/policies.html](http://www.pharmacy.umaryland.edu/preceptors/policies.html) (view “Remediation policy”)

**Preceptor Assessment**
The student will complete the Student Evaluation of Self/Preceptor/Site no later than one week (5 business days) following the completion of the project. This evaluation is completed via RXPreceptor.

Each summer, preceptors will be provided summaries (no student names included) of their evaluations in order for them to improve rotations.

**APPE 499 Student Time Log**

- **Name of Student:**
- **Preceptor Name:**
- **Project title:**
- **Start date:**
- **End date:**

<table>
<thead>
<tr>
<th>Date and Time</th>
<th>Hours Worked</th>
<th>Project Activity</th>
<th>Preceptor Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Please submit a copy of this to your preceptor as a “Field Encounter” on RXPreceptor or hand over in person. Use an additional sheet if necessary to log all hours.
APPE 499 Student Pinnacle Project ABSTRACT Submission
Submit under “requirements” in RXPreceptor

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 4th year rotation (APPE, APEX, or APPC) work with one preceptor to identify a pharmacy practice issue relevant to that site or your preceptor’s practice that requires an intervention. The preceptor and project MUST be identified no later than the 6th block of rotations (November 1st) in order to allow for adequate time for completion.
- Your role will be to research this topic, conduct a SWOT analysis to identify resources and limitations regarding the pharmacy practice issue, design an intervention to address the pharmacy practice issue, create an abstract summarizing your findings, and present your findings to your preceptor.
- Potential topics for projects include:
  - Medication use evaluation
  - Developing a collaborative practice agreement
  - Designing a new patient service
  - Developing a therapeutic protocol
  - Developing a patient education/outreach program
  - Participating on a research project
  - Literature review and summary report on a topic
  - Other topics as agreed upon between the student and preceptor

Suggested Project Timeline

- Ideally this project should be completed during the course of one rotation, but can be extended after approval of your preceptor, up to 20 weeks. For example, research projects may take longer than 5 weeks to complete since additional activities (e.g., applying for IRB approval, submission of an abstract to a national meeting, etc.) may need to be completed.
- It is imperative that the student and the preceptor should develop the project timeline together and agree upon specific deadlines and keep the project within 1 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 RXPreceptor 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 (e.g., ASHP Midyear Clinical Meeting, APhA Annual Meeting) or can result in publication in a related journal. The student and preceptor should discuss whether the project is appropriate for submission either for presentation and publication.
Evaluating/Rating Student Performance (Enter in RxPreceptor): 
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.

<table>
<thead>
<tr>
<th>Absent</th>
<th>Beginning</th>
<th>Developing</th>
<th>Intermediate</th>
<th>Proficient</th>
<th>Highly proficent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not aware of how to approach the skill</td>
<td>Aware of the deficiency in the skill and attempts to determine effort required to become competent</td>
<td>Initiates practice of the skill</td>
<td>Familiarity with skill develops through practice</td>
<td>Consistently demonstrates accurate performance of the skill</td>
<td>Demonstrates skill to a less experienced learner</td>
</tr>
<tr>
<td>Ability needs to independently complete the skill</td>
<td>Sporadically, but rarely able to perform the skill</td>
<td>Sometimes able to complete this skill</td>
<td>Mostly consistent in identifying or solving problems related to the skill</td>
<td>Can identify and solve problems related to the skill</td>
<td>Takes initiative to identify and solve problems related to the skill</td>
</tr>
<tr>
<td>Lacks ability to independently complete the skill</td>
<td></td>
<td></td>
<td></td>
<td>Performance is above graduate level</td>
<td>Performance is above graduate level</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ability</th>
<th>Demonstrates excellent depth and breadth of understanding of key content and knowledge and applies consistently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability</td>
<td>Student is consistently confident and able to complete the skill</td>
</tr>
<tr>
<td>Ability</td>
<td>Able to independently complete the skill</td>
</tr>
<tr>
<td>Ability</td>
<td>Demonstrates excellent depth and breadth of understanding of key content and knowledge and applies consistently</td>
</tr>
<tr>
<td>Supervision</td>
<td>Constant supervision and feedback are required but need is decreasing</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Requires major supervision to complete the skill</td>
<td>Constant supervision and feedback are required to completed the skill</td>
</tr>
<tr>
<td>Major mistakes are many when student attempts to complete the skill</td>
<td>Major mistakes are common when student attempts to complete the skill</td>
</tr>
<tr>
<td>Patient safety is at risk</td>
<td>Unable to self-correct</td>
</tr>
<tr>
<td>Major mistakes are limited</td>
<td>Minor mistakes occur</td>
</tr>
<tr>
<td>Minor mistakes occur</td>
<td>Minor mistakes occur</td>
</tr>
<tr>
<td>Unable to self-correct</td>
<td>Unable to self-correct</td>
</tr>
</tbody>
</table>
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 specific pharmacy practice issue.
- Identify the prevalence and incidence of the issue.
- Explain the economic/financial burden of the issue on the health care system.
- Describe the clinical impact/scope of the issue, including morbidity and mortality.
- Identify the humanistic impact/scope of the issue.

Outcome 2: Given an identified pharmacy practice issue, conduct a literature search to define the issue.
- Collect pertinent background information.
- Use primary and tertiary references as appropriate in defining the issue.
- If necessary, effectively use secondary literature searches to identify primary literature.
- Critically analyze information from multiple sources.
- Define the issue in a clear and concise manner with supporting evidence/rationale.
- Appropriately cite/reference the information.

Outcome 3: Given an identified pharmacy practice issue, identify resources and limitations (existing barriers and potential challenges) to address the specific pharmacy practice issue.
- Identify resources (existing strengths and potential support) to address the identified pharmacy practice issue. (SWOT Analysis-Strengths, Weaknesses, Opportunities and Threats)
- Identify limitations (existing barriers and potential challenges) to address the identified pharmacy practice issue.

Outcome 4: Given an identified pharmacy practice issue, describe the rationale for intervention to address the specific pharmacy practice issue.
- Cite the potential impact/scope of clinical, humanistic, and economic outcomes of maintaining the status quo of the identified and defined pharmacy practice issue.
- Identify national, state, and local calls for action to address the pharmacy practice issue.
- Describe professional and/or public standards and guidelines for addressing the pharmacy practice issue.
- Discuss the legal/regulatory and policy implications to address the pharmacy practice issue.

Outcome 5: Given the rationale for intervention, develop an implementation plan (a collaborative project/proposal) to address the specific pharmacy practice issue.
- Develop the mission, goals, objectives, and desirable outcomes for an intervention that addresses the identified and defined pharmacy practice issue.
- Base interventions on health theories and models, standards and guidelines, and/or primary literature.
- Identify the appropriate timelines for intervention.
- Identify measurable criteria and/or variables to determine successful intervention.

Outcome 6: Given a preceptor approved/identified intervention/topic, prepare and present findings in an oral presentation and/or written report, and poster presentation.

Skill 1 – Oral presentation and/or written report
- 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.
Outcome 7: Demonstrate acceptable qualities and characteristics of professional behavior for patient and provider communications, appearance and attire, timeliness and commitment, and initiative.

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 RXPreceptor tool. Evaluations are due no later than 7 days after the rotation was completed. Students should please send a copy of your final project to the preceptor directly or as a “field encounter” on RXPreceptor.**

**No need to submit paper copies to ELP**