Experiential Learning Program (ELP)

Course Numbers & Titles
Advanced Practice Electives (APEX) 402-426

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APEX | Course Title
--- | ---
402 | Compounding
403 | Practice Based Research
404 | Contemporary Pharmacy Practice-Administrative
406 | Clinical Pharmacology / Drug Development
408 | Drug Information
410 | Food and Drug Administration
411 | Informatics
412 | Investigational Drugs
414 | Legislative Experience
416 | Managed Pharmacy Care
417 | Medication Safety
418 | Leadership and Management
420 | Public Health
421 | Radio/Nuclear Pharmacy
426 | Teaching Experience

Students may contact individual course managers by appointment for course-related questions. For general questions, please contact the Experiential Learning Office.

Experiential Learning Office e-mail: elp@rx.umaryland.edu

Experiential Learning Program Website: www.pharmacy.umaryland.edu/elp
Credit Hours & Length of Rotation
5 credits; full-time five weeks (200 experiential 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).

Catalog Description
The goal of this rotation is to provide students with experience in diverse areas where individual patient care is not the focus. Students are expected to use abilities learned previously in the curriculum in order to meet general course objectives and site-specific objectives developed by the preceptor, with input from the student, in areas such as systems management, administration, population-based services, and government affairs.

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

1. Given an administrative or general practice site, explain the site’s mission, functions, and organizational structure.

2. Given an administrative or general practice site, describe the preceptor’s role and responsibilities within the organizational structure.

3. Given an administrative or general practice site, identify and characterize at least one current issue or opportunity related to the site’s mission, functions, and organizational structure.

4. Given a drug, health, and/or operational information question, formulate an efficient and effective answer using appropriate sources of information.

5. Given a preceptor approved topic, prepare and deliver a presentation to site personnel or other professionals within the administrative or general practice setting.

6. Given a preceptor identified topic, investigate and present findings in a written report.

7. Given technologies available at the practice setting, effectively perform professional functions.

8. Demonstrate acceptable qualities and characteristics of professional behavior for patient and provider communications, appearance and attire, timeliness and commitment, and initiative.
Terminal Performance Outcomes (TPOs)

TPO 4: Use technology effectively to carry out professional functions
TPO 13: Participate in quality assurance processes related to drug use
TPO 14: Participate in health education
TPO 16: Maintain professional competence
TPO 15: Participate in health policy decision-making processes related to drug use

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

Required and/or Recommended Equipment
The School of Pharmacy name badge must be worn during all rotations. Additional equipment may include:

- Lab coat
- Stethoscope
- Watch with second hand

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

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

Preceptor and Site Criteria
The preceptor must have a clinical affiliate faculty appointment with the University of Maryland School of Pharmacy. The preceptor is assigned to specific course(s) based upon experiences, 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, are accomplished.

Student Activities and Assignments
Students 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, such as presentations, projects, and other assignments. Additionally, students should follow up with preceptors if they do not receive written midpoint evaluations.
Student Assessment and Grading
The student is assessed by the preceptor on performance and professionalism at the midpoint and at the end of the rotation. Midpoint evaluations are completed in CORE ELMS for each rotation to document student performance and allow for areas of focus and improvement during the latter half of the rotation. The midpoint evaluation is not used in the calculation of the student’s final grade. Within one week of completion of the rotation, the Preceptor Evaluation of Student must be submitted to the Experiential Learning Office. Failure to do so may result in an “Incomplete.” Evaluations should be completed online in CORE ELMS.

Performance Definitions
Each performance item on the assessment tool, with the exception of professionalism/behavioral items, will be rated using the following definitions:

Final Letter Grade
The final grade is assigned based on the ratings assigned for all evaluation items according to the following criteria. The mid-point evaluation is not factored into the final grade. The professionalism/behavioral items do not contribute toward the letter grade. However, a “unacceptable” rating on any professionalism/behavioral item at the end of the rotation will result in automatic course failure.

The following rubric will be used to assign a letter grade for the rotation**:

<table>
<thead>
<tr>
<th>Performance Level</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absent</td>
<td>0</td>
</tr>
<tr>
<td>Beginning</td>
<td>5.7</td>
</tr>
<tr>
<td>Developing</td>
<td>9</td>
</tr>
<tr>
<td>Intermediate</td>
<td>10.2</td>
</tr>
<tr>
<td>Proficient</td>
<td>11.5</td>
</tr>
<tr>
<td>Highly Proficient</td>
<td>12.5</td>
</tr>
</tbody>
</table>

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

Students who wish to challenge a rotation grade must do so within five business days of the date of the preceptor’s completed evaluation. 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 this course’s Blackboard site course information page 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”).
Portfolio
Each student maintains a portfolio throughout APPE, APPC, and APEX rotations. The portfolio should be professional in appearance and organized into sections to include patient encounter documentations (i.e. SOAP notes), drug information questions, presentation handouts, special projects, the updated abilities checklist, and evaluations. **Portfolio contents must be void of any patient identifiers such as date of birth, name, contact information, and prescription numbers.** The course manager may review any student’s portfolio at any time for quality assurance. When requested, student portfolios MUST be submitted for review within 7 days following the request. Failure to do so will result in a one letter grade reduction.

Preceptor Assessment
The student submits the Student Evaluation of Self/Preceptor/Site on-line no later than one week following the completion of the rotation. Each summer, preceptors will be provided summaries (no student names included) of their evaluations in order for them to improve rotations. In an effort to assure anonymity of feedback, a minimum of two preceptor evaluations must be completed in order for the preceptor to receive student feedback.
Preceptor's Evaluation of Student  
APEX 402-426: Administrative and General Practice Experiences

Course (Select one):

<table>
<thead>
<tr>
<th>APEX</th>
<th>Course Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>□ 402</td>
<td>Compounding</td>
<td>□ 414</td>
<td>Legislative Experience</td>
</tr>
<tr>
<td>□ 404</td>
<td>Contemporary Pharmacy Practice-</td>
<td>□ 416</td>
<td>Managed Pharmacy Care</td>
</tr>
<tr>
<td></td>
<td>Administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ 406</td>
<td>Clinical Pharmacology/ Drug</td>
<td>□ 417</td>
<td>Medication Safety</td>
</tr>
<tr>
<td></td>
<td>Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ 408</td>
<td>Drug Information</td>
<td>□ 418</td>
<td>Leadership and Management</td>
</tr>
<tr>
<td>□ 410</td>
<td>Food and Drug Administration</td>
<td>□ 420</td>
<td>Public Health</td>
</tr>
<tr>
<td>□ 411</td>
<td>Informatics</td>
<td>□ 421</td>
<td>Radio/Nuclear Pharmacy</td>
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<tr>
<td>□ 412</td>
<td>Investigational Drugs</td>
<td>□ 426</td>
<td>Teaching Experience</td>
</tr>
</tbody>
</table>

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 ELP office.
- Grades are assigned based on the final evaluation.

Performance Outcomes Criteria
The preceptor evaluates the student at both the mid-point and at the conclusion of the rotation, using competency levels and descriptors. Each performance item on the assessment tool, with the exception of professionalism items, are scored 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.
### Performance Definitions

<table>
<thead>
<tr>
<th></th>
<th>Absent</th>
<th>Beginning</th>
<th>Developing</th>
<th>Intermediate</th>
<th>Proficient</th>
<th>Highly proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Awareness</strong></td>
<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><strong>Ability</strong></td>
<td>Lacks ability 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>Ability to complete this skill is adequate, but not independent</td>
<td>Able to independently complete the skill</td>
<td>Takes initiative to identify and solve problems related to the skill</td>
</tr>
<tr>
<td><strong>Supervision</strong></td>
<td>Requires major supervision to complete the skill</td>
<td>Constant supervision and feedback are required to completed the skill</td>
<td>Supervision and feedback are required but need is decreasing</td>
<td>Supervision needed to master major concepts</td>
<td>Supervision is minimal</td>
<td>Demonstrates excellent depth and breadth of understanding of key content and knowledge and applies consistently</td>
</tr>
<tr>
<td><strong>Mistakes</strong></td>
<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>
<td>Major mistakes are limited</td>
<td>No major mistakes</td>
<td>Occasional minor mistakes</td>
<td>Rare minor mistakes</td>
</tr>
<tr>
<td></td>
<td>Patient safety is at risk</td>
<td>Unable to self--- correct</td>
<td>Unable to self--- correct most errors</td>
<td>Unable to self--- correct</td>
<td>Able to self--- correct</td>
<td></td>
</tr>
</tbody>
</table>

### Performance Outcomes Criteria
Below are the course outcomes and skills that the preceptor assess on the midpoint and final evaluations:

Outcome 1: Given an administrative or general practice site, explain the site’s mission, function, and organizational structure.

- Describe the mission statement of the pharmacy or department within the organizational structure.
- List the daily activities and responsibilities of the pharmacy or department within the organizational structure.
- Explain the organizational structure and how the pharmacy or department helps to achieve the mission and goals of the setting.

Outcome 2: Given an administrative or general practice site, describe the preceptor’s role and responsibilities within the organizational structure.

- List and explain the preceptor's role and responsibilities within the department and relate them to the overall organizational structure.
- If applicable, list and explain the roles and responsibilities the preceptor has in respect to patient care, allied health care providers, and pharmacy administration.

Outcome 3: Given an administrative or general practice site, identify and characterize at least one current improvement opportunity related to the site's mission, functions, and organizational structure.

- Organize a project with preceptor input.
- Systematically generate timely questions.
- Critically analyze information from multiple sources.
- Develop and confidently support conclusions.

Outcome 4: Given a drug, health, and/or operational information question, formulate an efficient and effective answer using appropriate sources of information.

- Collect pertinent background information for each question to be answered.
- If necessary, effectively use secondary literature searches to identify primary literature.
- Use primary and tertiary references as appropriate in formulating responses.
- Respond to questions in a clear and concise manner with supporting evidence/rationale via written or verbal communication as appropriate to the situation.
- Provide timely responses as appropriate to the nature of the question.
- If a written answer is submitted, appropriately reference the document.

Outcome 5: Given a preceptor approved topic, prepare and deliver a presentation to site personnel or other professionals within the administrative or general practice setting.

- State learning objectives for the presentation.
- 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 6: Given a preceptor identified topic, investigate and present findings in a written report.

- Thoroughly research the issue, including a literature review for standards of care, using an organized approach.
- Accurately provide pertinent data from the investigation or literature to support findings/recommendations.
- Completely follow the preceptor’s instructions for format, length, and parameters for the report.
- Generate a report which conforms to appropriate conventions (e.g. style, grammar, vocabulary).
- If applicable, provide appropriate references for the final report.

Outcome 7: Given technologies available at the practice setting, effectively perform professional functions.

- Complete training in a timely manner.
- Follow appropriate procedures, including documentation.
- Utilize the capabilities of the technology and/or available data to identify and solve problems.

Outcome 8*:

*Site-appropriate (additional/optional) outcome.

Outcome 9: 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

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 results in a failure of 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.