Experiential Learning Program (ELP)

Course Numbers, Titles, and Managers
Advanced Practice Patient Care (APPC) 404-488 Electives (updated 04/30/19)

<table>
<thead>
<tr>
<th>APPC</th>
<th>Course Title</th>
<th>Course Manager</th>
<th>Phone</th>
<th>@rx.umaryland.edu</th>
</tr>
</thead>
<tbody>
<tr>
<td>404</td>
<td>Contemporary Pharmacy Practice – Patient Care</td>
<td>Erin VanMeter</td>
<td>301-738-6004</td>
<td>evanmeter</td>
</tr>
<tr>
<td>418</td>
<td>Transition/Continuity of Care</td>
<td>Jill Morgan</td>
<td>410-706-4332</td>
<td>jmorgan</td>
</tr>
<tr>
<td>419</td>
<td>Medication Therapy Management</td>
<td>Cherokee Layson-Wolf</td>
<td>410-706-1067</td>
<td>cwolf</td>
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<tr>
<td>425</td>
<td>Integrative Therapies – Patient Care</td>
<td>Agnes Ann Feemster</td>
<td>410-706-7150</td>
<td>afeemster</td>
</tr>
<tr>
<td>456</td>
<td>Ambulatory Clinic</td>
<td>Charmaine Rochester</td>
<td>410-706-8513</td>
<td>crochester</td>
</tr>
<tr>
<td>458</td>
<td>Bone &amp; Marrow Transplantation</td>
<td>James Trovato</td>
<td>410-706-2751</td>
<td>jtrovato</td>
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<tr>
<td>460</td>
<td>Cardiology</td>
<td>Sandeep</td>
<td>410-706-5842</td>
<td>sdevabha</td>
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<tr>
<td>462</td>
<td>Chemical Dependence</td>
<td>Bethany DiPaula</td>
<td>410-970-7136</td>
<td>bdipaula</td>
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<tr>
<td>464</td>
<td>Clinical Pharmacokinetics</td>
<td>Jill Morgan</td>
<td>410-706-4332</td>
<td>jmorgan</td>
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<tr>
<td>466</td>
<td>Critical Care/Emergency Medicine</td>
<td>Mojdeh Heavner</td>
<td>410-706-3498</td>
<td>mheavner</td>
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<tr>
<td>470</td>
<td>Geriatric Pharmacotherapy</td>
<td>Nicole Brandt</td>
<td>410-706-1491</td>
<td>nbrandt</td>
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<td>472</td>
<td>Hematologic Malignancies</td>
<td>James Trovato</td>
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<td>jtrovato</td>
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<tr>
<td>474</td>
<td>HIV/AIDS</td>
<td>Neha Pandit</td>
<td>410-706-2997</td>
<td>npandit</td>
</tr>
<tr>
<td>476</td>
<td>Infectious Diseases</td>
<td>Kimberly Claeyys</td>
<td>410-706-3215</td>
<td>kclaeyys</td>
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<tr>
<td>478</td>
<td>Medical Oncology</td>
<td>James Trovato</td>
<td>410-706-2751</td>
<td>jtrovato</td>
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<tr>
<td>480</td>
<td>Palliative Care</td>
<td>Lynn McPherson</td>
<td>410-706-3682</td>
<td>mmcpthers</td>
</tr>
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<td>482</td>
<td>Pediatrics</td>
<td>Jill Morgan</td>
<td>410-706-4332</td>
<td>jmorgan</td>
</tr>
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<td>484</td>
<td>Poison Information</td>
<td>Bruce Anderson</td>
<td>410-563-5581</td>
<td>banderson</td>
</tr>
<tr>
<td>486</td>
<td>Psychiatry</td>
<td>Bethany DiPaula</td>
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<td>Transplant</td>
<td>James Trovato</td>
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<td>jtrovato</td>
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<tr>
<td>492</td>
<td>Specialty Pharmacy</td>
<td>Agnes Ann Feemster</td>
<td>410-706-7150</td>
<td>afeemster</td>
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<tr>
<td>494</td>
<td>Long-Term Care Pharmacy</td>
<td>Agnes Ann Feemster</td>
<td>410-706-7150</td>
<td>afeemster</td>
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</tbody>
</table>

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

Revised 2/12/19
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 experience in a variety of patient care practice environments (e.g., medicine subspecialties, compounding, nuclear pharmacy, poison information). Students will be expected to utilize abilities/skills and knowledge learned previously in the curriculum in order to participate in the Pharmacists’ Patient Care Process, which includes collecting and assessing patient-specific information; developing and implementing individualized patient-centered care plans; and monitoring and evaluating the effectiveness of care plans. Student will also educate patients or caregivers, and respond to drug information inquiries. This will be accomplished through a variety of oral and written communication techniques.

The Pharmacists’ Patient Care Process (PPCP)
Course Outcomes

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

1. Given a patient or problem, collect from existing patient/medical records or a health care professional the patient-specific information that is necessary for the task being performed. (PPCP – Collect)

2. Given patient-specific information, identify, assess, and prioritize medical and drug-related problems. (PPCP – Assess)

3. Given a problem assessment, design evidence-based and cost-effective patient-centered care (pharmacologic and non-pharmacologic) plans and develop goals for achieving treatment outcomes. (PPCP – Plan)

4. Given a treatment plan, implement care plan in collaboration with other health care professionals and the patient or caregiver. (PPCP – Implement)

5. Given treatment plan, monitor and evaluate the effectiveness and safety of the plan and modify the plan as needed. (PPCP – Follow-up: Monitor and Evaluate)

6. Given a case encountered on rotation, demonstrate knowledge of the pathophysiology of disease states commonly encountered in the setting and of the drugs/drug classes used to treat those disease states.

7. Given a drug information question, formulate an efficient and effective answer using appropriate sources of drug information.

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

9. 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: Collaborate with other health care professionals in the development of individualized patient-specific care plans

TPO 5: Establish goals of therapy and select the appropriate dosage form, formulation, route of drug administration, and/or medication delivery system

TPO 6: Develop monitoring plans to determine effectiveness of the care plan, to detect adverse drug effects, and to evaluate the actual or potential impact of drug-drug and drug-food interactions on patient health
TPO 7: Assess an existing patient's therapy and recommend modifications to optimize patient care.

TPO 8: Employ professional practice standards to administer medication therapy to patients.

TPO 9: Address medication- and health-related problems of patients during transitions of care and contribute to coordination of care, including referral to another health care professional.

TPO 10: Utilize drug formularies to optimize drug therapy recommendations and improve access to medications.

TPO 12: Use technologies effectively to carry out professional functions including dispensing medications and maintaining patient records.

TPO 18: Collaborate with other health care professionals, patients, and caregivers to develop monitoring plans.

TPO 19: When appropriate, recommend education and self-management training to optimize the benefit-to-risk ratio of the selected therapies.

TPO 29: Respond to general medication information requests from patients, health professionals, and lay media.

TPO 32: Participate in health policy decision-making processes related to medication use by evaluating primary literature to assist policy makers and prescribers with making well-informed decisions about medication therapy.

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.

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 their 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

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 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, were accomplished.

Elective rotations allow students to pursue their own areas of interest and to develop greater skill, proficiency, and confidence. Patient care electives in specialty therapeutic practices prepare students to competently care for patients and to monitor outcomes.

**Student Activities and Assignments**
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, presentations, patient encounter documentation, and the required abilities checklist. Additionally, students should follow up with preceptors if they do not receive a written midpoint evaluation.

**Student Assessment and Grading**
The student will be assessed by the preceptor on performance and professionalism at the midpoint and at the end of the rotation. Midpoint evaluations are required to be 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 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 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 will be assigned based on the ratings assigned for all evaluation items 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 “unacceptable” rating on any professionalism/behavioral item at the end of the rotation will result in automatic course failure.

A red box indicates a professionalism failure or incomplete abilities checklist. Letter grades will be based on final scores as follows:

- **A** $\geq 90-100\%$
- **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 this course’s Blackboard site course information page for School policies or the School’s website at: http://www.pharmacy.umaryland.edu/remediationpolicy (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 will submit 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. If a preceptor has had only one student during the previous year, no summary will be sent.
Preceptor’s Evaluation of Student
APPC 418-488: Advanced Practice Patient Care Electives

Course (Select one):

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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.
<table>
<thead>
<tr>
<th>Awareness</th>
<th>Absent</th>
<th>Beginning</th>
<th>Developing</th>
<th>Intermediate</th>
<th>Proficient</th>
<th>Highly proficient</th>
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</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</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>
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<tr>
<td>Ability</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>
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<td>Supervision</td>
<td>Requires major supervision to complete the skill</td>
<td>Constant supervision and feedback are required to complete</td>
<td>Supervision and feedback are required but need is</td>
<td>Supervision is minimal</td>
<td>Rarely needs intervention</td>
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<td>Mistakes</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>Functions independently</td>
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<td>Minor mistakes occur</td>
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<td>Occasional minor mistakes</td>
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<td>Rare minor mistakes</td>
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</table>
Performance Outcomes Criteria

Below are the course outcomes and skills that the preceptor will assess on the midpoint and final evaluations:

Outcome 1: Given a patient or problem, collect from existing patient/medical records or a health care professional the patient-specific information that is necessary for the task being performed. (PPCP – Collect)

Skill 1 – Subjective History Collection from Non-Patient Sources
Given a patient or problem, the student is able to:
• Identify and collect pertinent subjective information from non-patient sources such as existing medical records, pharmacy records, and other health care providers (e.g. refill records, past medical history, past visit history).

Skill 2 – Objective History Collection from Non-Patient Sources
Given a patient or problem, the student is able to:
• Identify pertinent laboratory data or testing that is required to assess efficacy/toxicity of current drug therapy or to evaluate new complaints.
• Elicit laboratory and testing results from existing medical records, pharmacy records, or other health care providers.
• Accurately perform necessary calculations based on the data collected (e.g. CrCl, adjust phenytoin levels, risk calculations, etc.)

Outcome 2: Given patient specific information, identify, assess and prioritize medical and drug-related problems. (PPCP – Assess)

Skill 1 – Problem Identification
Given all relevant subjective and objective information, the student is able to:
• Clearly identify all diseases or medical conditions (i.e. problem list does not include merely a list of symptoms).
• Correctly identify presence of or risk for the following drug-related problems:
  Indication- Untreated Indication; Drug Use Without Indication
  Effectiveness- Ineffective Treatment Regimen; Subtherapeutic Dose; Improper Drug Selection
  Safety- Adverse Drug Reaction, Drug Interaction, Overdosage;
  Adherence - Failure to Take/Receive Drug

Skill 2 – Problem Assessment
Given a medical or drug-related problem, the student is able to:
• Identify therapeutic goals/endpoints.
• Assess problem etiology.
• Assess problem severity/stability.
• Appropriately prioritize problems.

**Outcome 3:** Given a problem assessment, design evidence-based and cost-effective patient-centered care (pharmacologic and non-pharmacologic) plans and develop goals for achieving treatment outcomes. (PPCP – Plan)

Given a problem assessment, the student is able to:
• Recommend pharmacologic therapy for each of the problem(s) assessed that is likely to result in desirable health outcome(s).
• Recommend appropriate non-pharmacologic therapy for each of the problem(s) assessed.
• Base recommendations on published clinical practice guidelines, patient-related variable, and/or primary literature.

**Outcome 4:** Given a treatment plan, implement care plan in collaboration with other health care professionals and the patient or caregiver. (PPCP – Implement)

**Outcome 5:** Given treatment plan, monitor and evaluate the effectiveness and safety of the plan and modify the plan as needed. (PPCP – Follow-up: Monitor and Evaluate)

Given a treatment plan, the student is able to:
• Develop and implement (when possible) a monitoring plan for the treatment recommendation(s) that will evaluate therapeutic efficacy.
• Develop and implement (when possible) a monitoring plan for the treatment recommendation(s) that will evaluate drug toxicity.
• Base monitoring plan on severity of condition, published clinical practice guidelines, primary literature, and/or package inserts

**Outcome 6:** Given a case encountered on rotation, demonstrate knowledge of the pathophysiology of disease states commonly encountered in the setting and of basic information about the drugs/drug classes used to treat those disease states. The student is able to:
• Recall knowledge about drug name, mechanism of action, usual dosing, common side effects, and major drug interactions for drugs commonly and routinely encountered on the rotation.
• Discuss disease pathophysiology and explain how subjective and objective findings correlate to pathophysiology for diseases commonly and routinely encountered on the rotation.

**Outcome 7:** Given a drug information question, formulate an efficient and effective answer using appropriate sources of drug information.

Given a question, the student is able to:
• 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 8: Given technologies available at the practice setting, effectively perform professional functions.
Given technologies available at the practice site, the student is able to:
• Follow appropriate procedures, including documentation.
• Utilize the capabilities of the technology and/or available data to identify and solve problems.

Outcome 9: Demonstrate acceptable qualities and characteristics of professional behavior for patient and provider communications, appearance and attire, timeliness and commitment, and initiative.

Professionalism 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 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.