

**Experiential Learning Program  
Advanced Practice Patient Care (APPC) 404-494  
Electives 2022 - 2023**

**Course Numbers, Titles, and Managers**

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

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](mailto:elp@rx.umaryland.edu)

Experiential Learning Program Website: [www.pharmacy.umaryland.edu/elp](http://www.pharmacy.umaryland.edu/elp)

**Credit Hours:**

5 credits, full-time five weeks (200 experiential hours)

**Eligible Class Standing:**

P4

**Prerequisite Courses:**

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

**Course 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 are 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 is accomplished through a variety of oral and written communication techniques.

**Course Outcomes**

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

1. **Demonstrate collaboration and effective verbal and written communication skills with patients, caregivers, and the interprofessional team.**
2. **Demonstrate knowledge of drugs, disease states and physical assessment skills appropriate for this practice setting.**
3. **Identify and evaluate current and appropriate source of literature to formulate an effective evidence-based response.**
4. **Utilize the pharmacist patient care process to conduct an effective patient interview and collect appropriate subjective and objective information from the patient, caregiver, and health care records.**
5. **Utilize the pharmacist patient care process to identify and assess problems, implement a plan, monitor, evaluate, and follow up with the patient.**
6. **Demonstrate acceptable qualities and characteristics of professional behavior.**

**Required Textbooks/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 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: [https://www.pharmacy.umaryland.edu/media/SOP/wwwpharmacyumarylandedu/preceptors/pdfs/preceptor-manual\\_080819.pdf](https://www.pharmacy.umaryland.edu/media/SOP/wwwpharmacyumarylandedu/preceptors/pdfs/preceptor-manual_080819.pdf)

**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.

**Course Activities and Delivery Method(s):**

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.

**Assessments 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 will be rated using the following definitions except professionalism. All performance areas are weighted equally. **An “unacceptable” rating on any professionalism/ behavioral item at the end of the rotation will result in automatic course failure.**

Level 1	Unsatisfactory Performance with Low to Minimal Trust
Level 2	Needs Improvement with Moderate Trust
Level 3	Progressing Satisfactorily with High Trust
Level 4	Practices Independently with Distant Supervision and Complete Trust

**Final Letter Grade: A red box indicates a professionalism failure. Letter grades will be based on final scores as follows:**

A	≥ 3.5
B	3.0-3.49
C	2.5-2.99
F	<2.5

**Grade Appeals:** Students who wish to appeal a rotation grade must do so within one week of the date of the preceptor’s completed evaluation. Please refer to the Academic Affairs policy regarding grade challenges and appeals.

### 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> (view “Remediation policy”)

**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

#### Evaluating/Rating Student Performance (Enter in Core Elms):

- Select appropriate rating (Level 1, 2, 3, or 4) in each column for each item and add comments as needed. Note: Comments are strongly encouraged. If a student scores a 2 or lower, the evaluator must provide constructive feedback on how to improve performance
- 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 “1 or 2” 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: 1, 2, 3, or 4. 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.

Level 1	Level 2	Level 3	Level 4
<b><i>Unsatisfactory Performance with Low Trust</i></b>	<b><i>Needs Improvement with Moderate Trust</i></b>	<b><i>Progressing Satisfactorily with High Trust</i></b>	<b><i>Independent with Complete Trust</i></b>
Student does not meet outcomes when completing basic or routine tasks, AND student requires complete guidance or was unprepared; preceptor had to do most of the tasks. “Preceptor did it.”	Student meets outcomes when completing basic or routine tasks, AND student performs some tasks but requires repeated directions. “Preceptor talked student through it.”	Student meets outcomes when completing basic and complex tasks, AND student demonstrates some independence, only requiring intermittent prompting. “Preceptor directed student from time to time.”	Student meets outcomes when completing basic and complex tasks, AND student functions independently with distant supervision, only needing assistance with nuances or complex situations. “Preceptor was available just in case.”

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

<b>DOMAINS</b>	<b>EVALUATION</b>	<b>EXAMPLE SKILLS</b>
<b>Communication and Collaboration as an Interprofessional Team Member</b>	<ol style="list-style-type: none"> <li>1. Communicates verbally with the interprofessional team, appropriately demonstrates a willingness to form an opinion, expresses observations and/or asks questions, demonstrates assertiveness and confidence when making recommendations, and responds to questions in a clear and concise manner.</li> <li>2. Communicates in writing.</li> <li>3. Communicates verbally with patients and their caregivers.</li> <li>4. Collaborates with the interprofessional team and engages patients and/or caregiver</li> </ol>	<ol style="list-style-type: none"> <li>1. Presenting the case in standard format (e.g. CC/HPI followed by subjective information, followed by objective information).</li> <li>2. Verbally presenting only the information relevant to the problem(s) at hand.</li> <li>3. Offering his/her own assessment of the problem(s) without prompting.</li> <li>4. Offering his/her own plan for the problem(s) without prompting.</li> <li>5. Record patient encounters in a manner that conforms to the practice site's standards.</li> <li>6. Provide complete, accurate, organized, and concise written communication regarding the patient encounter consistent with site requirements.</li> <li>7. Exhibit command of verbal expression (e.g. fluency, grammar, vocabulary, tone, volume, modulation of voice, rate of speech, and pronunciation).</li> <li>8. Effectively engage the patient/caregiver with non-verbal expression (e.g. eye contact, gesture, posture, use of silence/active listening).</li> <li>9. Use appropriate terminology and abbreviations (e.g. avoid "do not use" abbreviations, use lay-terms for patient's Personal Medication Record [PMR]).</li> </ol>
<b>Drug and Disease State Knowledge</b>	<ol style="list-style-type: none"> <li>1. Recalls knowledge about drug name, mechanism of action, usual dosing, common side effects, and major drug interactions.</li> <li>2. Discusses disease pathophysiology and explain how subjective and objective findings correlate to pathophysiology for diseases.</li> <li>3. Demonstrates knowledge of evidence- based medicine and clinical practice guidelines.</li> </ol>	



<b>Use and Interpretation of Drug Information</b>	<ol style="list-style-type: none"><li>1. Retrieves scientific and clinical literature</li><li>2. Evaluates and applies scientific and clinical literature</li><li>3. Given a drug, health or operational information question, the student formulates a timely efficient, thorough and effective response using and citing appropriate sources of information</li></ol>	<ol style="list-style-type: none"><li>1. Collect pertinent background information for each question to be answered.</li><li>2. If necessary, effectively use secondary literature searches to identify primary literature.</li><li>3. Use primary and tertiary references as appropriate in formulating responses.</li><li>4. Respond to questions in a clear and concise manner with supporting evidence/rationale via written or verbal communication as appropriate to the situation.</li><li>5. Provide timely responses as appropriate to the nature of the question.</li><li>6. If a written answer is submitted, appropriately reference the document.</li></ol>
<b>Pharmacist Patient Care Process- Collection of Information</b>	<ol style="list-style-type: none"><li>1. Conducts interviews to collect and organize subjective information.</li><li>2. Collects and organizes objective information.</li></ol>	<ol style="list-style-type: none"><li>1. Elicit a complete chief complaint and history of present illness.</li><li>2. Elicit information regarding past medical history, social history, and family history as pertinent to the encounter.</li><li>3. Conduct a review of systems as pertinent to the encounter.</li><li>4. Collect a complete and accurate medication history (e.g. prescriptions, OTCs, herbals, dietary supplement).</li><li>5. Elicit information regarding patient adherence to the medication regimen and/or treatment plan.</li><li>6. Appropriately respond to patient/caregiver's needs and feelings.</li><li>7. Demonstrate an organized, but flexible, approach to the interview.</li><li>8. Adapt to literacy and cultural needs.</li><li>9. Elicit laboratory and testing results from existing medical records, pharmacy records, or other providers.</li></ol>
<b>Pharmacist Patient Care Process- Problem Assessment</b>	<ol style="list-style-type: none"><li>1. Identifies and develops a problem list.</li><li>2. Assesses each problem (etiology, severity, why now).</li><li>3. Identifies drug related problems and assesses each medication for indication, appropriateness, effectiveness, safety, and adherence.</li></ol>	<ol style="list-style-type: none"><li>1. Clearly identify all diseases or medical conditions (i.e. problem list does not include merely a list of symptoms).</li><li>2. Appropriately prioritize problems.</li><li>3. Identify and perform site appropriate assessments necessary for determining efficacy/toxicity of current drug therapy or to evaluate new complaints.</li></ol>





		<ol style="list-style-type: none"><li>4. Identify pertinent laboratory data or testing that is required to assess efficacy/toxicity of current drug therapy or to evaluate new complaints.</li><li>5. Accurately perform necessary calculations based on the data collected (e.g. CrCl, adjust phenytoin levels, risk calculations, etc.)</li><li>6. Correctly identify presence of or risk for the following drug-related problems:<ol style="list-style-type: none"><li>a. Indication- Untreated Indication; Drug Use Without Indication</li><li>b. Effectiveness- Ineffective Treatment Regimen; Subtherapeutic Dose; improper Drug Selection</li><li>c. Safety- ADR, Drug interaction, Overdosage,</li><li>d. Adherence - Failure to Take/Receive Drug</li><li>e. Identify therapeutic goals/endpoints.</li></ol></li><li>7. Assess problem etiology.</li><li>8. Assess problem severity/stability.</li><li>9. Utilize patient-related variables (i.e. age, family/social history, etc.) to identify risk factors for diseases.</li><li>10. Identify vaccinations that should be administered.</li></ol>
<b>Pharmacist Patient Care Process- Plan and Follow-Up: Monitor and Evaluate</b>	<ol style="list-style-type: none"><li>1. Creates the most appropriate cost- effective and evidence-based treatment plan, designed to create optimal patient outcomes.</li><li>2. Develops an appropriate monitoring plan to assess for efficacy and toxicity.</li><li>3. Evaluates the treatment to determine if adjustments to the plan are needed.</li><li>4. Assures proper follow-up and transition of care throughout the healthcare system.</li></ol>	<ol style="list-style-type: none"><li>1. Recommend pharmacologic therapy for each of the problem(s) assessed that is likely to result in desirable health outcome(s).</li><li>2. Recommend appropriate non-pharmacologic therapy for each of the problem(s) assessed.</li><li>3. Base recommendations on published clinical practice guidelines, patient-related variable, and/or primary literature.</li><li>4. Recommend drug and non-drug therapy to prevent disease and promote health (e.g. calcium and vitamin D for bone health, ASA for primary prevention).</li><li>5. Recommend appropriate health screenings.</li><li>6. Develop and implement (when</li></ol>





		<p>possible) a monitoring plan for the treatment recommendation(s) that will evaluate therapeutic efficacy and drug toxicity.</p> <ol style="list-style-type: none"><li>7. Base monitoring plan on severity of condition, published clinical practice guidelines, primary literature, and/or package inserts.</li></ol>
<b>Pharmacist Patient Care Process-Implement</b>	<ol style="list-style-type: none"><li>1. Educates the patient and/or caregiver on treatment and monitoring plans and assesses comprehension of the plan.</li><li>2. Implements a treatment plan in collaboration with the patient and/or interprofessional team.</li></ol>	<ol style="list-style-type: none"><li>1. Counsel the patient and/or caregiver on his/her treatment plan (drug and non-drug), including therapy benefits/risks.</li><li>2. Counsel the patient and/or caregiver on self-monitoring parameters.</li><li>3. Accurately educate the patient and/or caregiver regarding directions/instructions for use, and when indicated, demonstrate administration technique and evaluate the patient and/or caregiver's ability to administer/use medication(s).</li><li>4. Evaluate the patient and/or caregiver's comprehension of the education delivered.</li><li>5. Assess the patient's ability to adhere to the new treatment plan and make appropriate recommendations for improvement.</li><li>6. Respond appropriately to questions posed by the patient and/or caregiver.</li><li>7. Use appropriate terminology for the patient/caregiver.</li></ol>
<b>Professionalism</b>	<ol style="list-style-type: none"><li>1. Demonstrates acceptable qualities and characteristics of professional behavior.</li></ol>	<ol style="list-style-type: none"><li>1. Participates in the process of self-assessment and displays an interest in lifelong learning and continuous professional development</li><li>2. Maintains a professional manner in both appearance and behavior at all times</li><li>3. Demonstrates courtesy, respect, cultural sensitivity and tolerance towards others and exhibits self- control in all interactions</li><li>4. Maintains confidentiality</li><li>5. Arrives on time and prepared for all rotation activities, remains engaged in patient care, and completes all duties until permission to leave</li><li>6. Demonstrates appropriate time-management skills and the ability to prioritize</li><li>7. Demonstrates initiative and responsibility for providing patient care</li></ol>



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		<ol style="list-style-type: none"><li>8. Demonstrates an ability to receive, process, and respond appropriately to constructive feedback</li><li>9. Demonstrates active listening and empathy</li></ol>
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