**Learning Experiences of Advanced Practice In**

*Community Pharmaceutical Care*

**Auburn University School of Pharmacy**

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>PYPP 5610</th>
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<tbody>
<tr>
<td>Course Title:</td>
<td>Community Pharmaceutical Care</td>
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<tr>
<td>Credit Hours:</td>
<td>3 Semester Hours</td>
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<tr>
<td>Prerequisites:</td>
<td>P4 Standing</td>
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<tr>
<td>Corequisite:</td>
<td>Advanced Practice Experience in a community pharmacy practice setting that provides pharmaceutical care services such as disease management and other advanced patient care activities.</td>
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**Background:**

**Relation to Pharmaceutical Care.** The community pharmacy practice setting provides the opportunity for pharmacists to be "the most accessible health care providers." To achieve this, pharmacists must be able to provide cognitive services such as disease management, triage of patients to pharmacist-directed care or referral to medical services, individualized patient education including non-prescription/self-care counseling, and patient follow-up and monitoring. The primary purpose of this rotation is to prepare Pharm.D. students to be a health care provider in the community setting. The patient care process emphasized during this rotation is one in which a pharmacist cooperates with a patient and other health professionals in designing, implementing, and monitoring a therapeutic plan that will produce specific positive outcomes for the patient.

Community pharmacy practice settings are undergoing significant change to provide patient-focused care and the sites where this rotation is taught are involved in this transition. The student will participate in this transition process by promoting the role of the pharmacist to patients through conduction of a special project or pilot implementation of a new pharmaceutical care service. Preparation for this project/pilot activity is expected to begin by means of submission of a proposal to the preceptor at the beginning of the P4 year (or earlier).

**Practice Description:**

This rotation will take place in either an independent or chain pharmacy setting in the community.
## Outcomes and Goals:

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<tr>
<th>Programmatic Outcome</th>
<th>Course Objectives</th>
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<tr>
<td><strong>1. Communication Abilities</strong> - The student shall read, write, speak, listen, and use media to communicate.</td>
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</table>
A. Effectively communicate, verbally and in writing (e.g., consultations progress notes, drug information responses and other documents), with other health care professionals (pharmacists, physicians, nurses, etc.) about therapeutic plans, other patient care needs, and health care issues.  
B. Articulate and defend rationale and conclusions regarding drug therapy.  
C. Write patient care notes/documents that:  
i. Are accurate, logical, yet only pertinent information  
  ii. Provide complete drug therapy directions (dosage, route, frequency, duration, monitoring parameters, and time of follow up)  
  iii. Use correct terminology, spelling, and grammar.  
D. Effectively communicate patient and/or medication self-management information to patients and health professionals.  
E. Deliver appropriate and effective patient counseling skills.  
F. Formulate and deliver programs for health care consumers that center on disease prevention and wellness promotion (i.e., smoking cessation, exercise, nutrition, immunizations, weight reduction).  
G. Prepare and present an educational program to a group of health care professionals or patients in an effective manner.  |
| **2. Thinking Abilities** - The student shall acquire, comprehend, apply, synthesize, and evaluate information. The student shall integrate these abilities to identify, resolve, and prevent problems and make appropriate decisions. |  
A. Provide concise, applicable, and timely responses to requests for drug information from health care professionals and patients. Specifically, the student shall:  
i. Perceive, assess, and evaluate drug information needs.  
  ii. Apply a systematic approach to solve drug information questions.  
  iii. Demonstrate efficient literature search strategies.  
  iv. Select and use the most appropriate references and cite only pertinent references.  
  v. Interpret and synthesize information from multiple sources into a concise written or verbal presentation.  
B. Compare and contrast new information that is encountered during daily rotation activities with prior knowledge in order to assess its value and refine one's personal understanding.  |
| **3. Professional Ethics and Identity** - The student shall behave ethically. The student shall accept the responsibilities embodied in the principles of pharmaceutical care. |  
A. Make appropriate ethical and legal decisions.  
B. Accept responsibility and provide patient-centered care.  
C. Maintain excellence in personal practice.  
D. Exhibit a professional demeanor.  |
| **4. Social Interaction, Citizenship, and Leadership** - The student shall demonstrate appropriate interpersonal and intergroup behaviors. |  
A. Display appropriate interpersonal behaviors.  
B. Display appropriate team behaviors.  |
| **5. Self-Learning Abilities** - The student shall assess continuously his/her learning needs and develop the ability to respond appropriately. |  
A. Display independent self-learning:  
i. Self-assess pharmacotherapy/practice responsibilities and develop improved approaches to pharmacotherapy and other aspects of practice.  
  ii. Recognize self-limitations (e.g., prejudices, assumptions, bias).  
  iii. Assess one's own abilities independently.  
  iv. Consider strengths and weaknesses when developing a personal learning plan.  
  v. Implement and successfully complete personal learning plans.  
  vi. Respond appropriately to constructive feedback.  
  vii. Identify areas for new practice opportunities and/or new professional roles and use self-directed learning skills to initiate or implement them.  |
| **6. Patient Assessment** - The student shall contribute to the database of information about the patient by: a) performing a medication history, review of systems, and physical assessment, b) requesting laboratory tests, and c) assessing medical, socio-behavioral and economic status. |  
A. Perform an accurate and effective medication history/patient interview.  
B. Perform an accurate and effective socio-behavioral assessment.  
C. Perform relevant and accurate physical assessment procedures.  
D. Develop functional patient databases by gathering and generating relevant information.  |
| **7. Drug Therapy Assessment** - The student shall assess the appropriateness of patient's drug therapy, including consideration of the chemical, pharmaceutical, |  
A. Assess each acute and chronic medical problem.  
B. Identify the following drug-related problems:  
i. Drug therapy is needed for untreated indications.  
  ii. Patient is receiving a drug that has no indication and/or there is therapeutic duplication.  
  iii. There is a better choice of drug based on patient/disease characteristics, formulary, cost, etc.  |
pharmacokinetic, and pharmacological characteristics of the administered medications.

iv. Drug therapy needs optimization (population and patient-specific pharmacokinetic and pharmacodynamic data indicate a drug regimen is not optimized).

v. Medication nonadherence.

vi. Drug induced disease/medical conditions.

vii. Socio-behavioral and economic barriers to effective drug therapy.

viii. Adverse drug reactions that are substantiated by laboratory, test, and physical findings.

ix. Routes of administration that are not the best, safest, and most cost-effective.

x. Drug interactions that are substantiated with pharmacokinetic/dynamic and compatibility information.

C. Identify and evaluate each drug-related problem.

D. Prioritize drug-related problem list.

8. **Develop, Implement, and Monitor Drug Therapy Plans** – The student shall develop a therapeutic plan for the patient, which includes appropriate monitoring to address any problem identified.

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<tbody>
<tr>
<td>A.</td>
<td>Establish desired therapeutic outcomes.</td>
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<tr>
<td>B.</td>
<td>Consider drug and non-drug therapy alternatives.</td>
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<tr>
<td>C.</td>
<td>Develop drug therapy plans that are patient-specific, comprehensive, logical, practical, consider current evidence-based medicine recommendations, include strategies for prevention, and include patient education.</td>
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<tr>
<td>D.</td>
<td>Establish a plan for therapeutic drug monitoring that includes accurate documentation of population and patient-specific parameters, dosing history/administration times, monitoring parameters, and daily SOAP notes/plans.</td>
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<td>E.</td>
<td>Develop and implement the pharmacotherapeutic plan promptly, efficiently, accurately, and effectively.</td>
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<tr>
<td>F.</td>
<td>Use an effective patient monitoring system (monitoring forms).</td>
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<td>G.</td>
<td>Monitor the patient and follow up at appropriate intervals.</td>
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<tr>
<td>H.</td>
<td>Revise drug therapy plans on an ongoing basis.</td>
</tr>
<tr>
<td>I.</td>
<td>Ensure continuity of pharmaceutical care to and from the acute and ambulatory care patient care settings.</td>
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9. **Pharmaceutical Decision-Making** - The student shall demonstrate the ability to make pharmaceutical decisions. (Pharmaceutical decisions determine what, why, where, and how drug therapy is provided. The making of pharmaceutical decisions is the foremost expressions of the professional knowledge, responsibility, and authority of pharmacists.) The intent of a decision is to maximize the patient's response to drug therapy and prevent or resolve a drug-related problem(s) in order to endure positive outcomes.

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<tr>
<td>A.</td>
<td>Pursue the role of drug therapy practitioner over that of drug therapy advisor.</td>
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<td>B.</td>
<td>Participate in pharmaceutical decision-making by:</td>
</tr>
<tr>
<td></td>
<td>i. Identifying opportunities for decision-making.</td>
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<td></td>
<td>ii. Proactively engaging decision-making opportunities</td>
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<td></td>
<td>iii. Formulating decision rationale that is the result of rigorous inquiry, scientific reasoning, and evidence</td>
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<td></td>
<td>iv. Pursuing the highest levels of decision-making.</td>
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<td></td>
<td>v. Seeking independence in making decisions and accepting personal responsibility for the outcomes to patients resulting from one's decisions.</td>
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<td>vi. Personally enacting decisions.</td>
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10. **Medication Use Systems** - The student shall specify, develop, use and evaluate acquisition, inventory control and distribution systems, while documenting and maintaining quality.

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<td>A.</td>
<td>Work effectively within a medication use system (formulary, medication errors, ADR reporting.)</td>
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<tr>
<td>B.</td>
<td>Utilize effective methods to monitor and evaluate the cost of drug therapy.</td>
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<tr>
<td>C.</td>
<td>Schedule medications and laboratory testing so that they are congruent with patient care, facility procedures, and are feasible.</td>
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## Typical Rotation Schedule

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<thead>
<tr>
<th>Times</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Weekends</th>
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<tbody>
<tr>
<td>7-8AM</td>
<td>Student-Preceptor Conference</td>
<td>Student Presentation</td>
<td>Student Preceptor Conference</td>
<td>Student Presentation</td>
<td>Student Preceptor Conference</td>
<td>Student Preceptor Conference</td>
</tr>
<tr>
<td>8-9AM</td>
<td>Pharmacy New Services/Project</td>
<td>Pharmacy Services</td>
<td>Hypertension Screening</td>
<td>Pharmacy Services</td>
<td>Intake/Diabetes</td>
<td>Intake/Diabetes</td>
</tr>
<tr>
<td>9-10AM</td>
<td>Intake/Diabetes Implementation</td>
<td>Intake/Diabetes</td>
<td>Services/alternating with</td>
<td>Cholesterol Screening</td>
<td>Walk-ins</td>
<td>Walk-ins</td>
</tr>
<tr>
<td>10-11AM</td>
<td>Walk-ins Time</td>
<td>Pharmacy Services</td>
<td>Hypertension Screening</td>
<td>Walking q wk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-12 Noon</td>
<td>Open</td>
<td>Open</td>
<td>New Services/Project Implementation</td>
<td>Time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-1PM</td>
<td>Brown Bag/Hypertension Screening at various community sites</td>
<td>Patient Care Services/Walk-ins Phone Follow up Medication Adherence</td>
<td>MD detailing q 2 weeks</td>
<td></td>
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<tr>
<td>1-2PM</td>
<td>Open</td>
<td>Open</td>
<td>Open</td>
<td>Patient Care Services/Walk-ins</td>
<td></td>
<td></td>
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<tr>
<td>2-3PM</td>
<td>Open</td>
<td>Open</td>
<td>Open</td>
<td></td>
<td></td>
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<tr>
<td>3-4PM</td>
<td>Patient Care Services/Walk-ins</td>
<td>Phone Follow up</td>
<td>Medication Adherence</td>
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<tr>
<td>4-5PM</td>
<td>Open</td>
<td>Open</td>
<td>Open</td>
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### Rotation Activities:

1. **Orientation to Pharmacy** - During the first few days of the program, the student should be oriented to the pharmacy and pertinent policies and procedures. The student should:
   
   a. Tour the pharmacy and meet employees. The instructor should explain the employee's duties to the student and the student's responsibilities as a pharmacy student to the employees.

   b. Review the pharmacy's policies and procedures if a manual is available. The student and instructor should discuss the policies and procedures. Specific discussion points should include:
      
      1. Confidentiality
      2. Appropriate Dress
      3. Lines of Authority
      4. Pharmacy security
      5. The student's schedule
      6. Available drug information resources
      
   c. Discuss the instructor's practice philosophy regarding professional responsibilities and pharmaceutical care.

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1 This schedule is typical of most rotations; however, each instructor will provide a more specific schedule in the individual rotation schedule.
d. Learn how to access and interpret a patient's pharmacy record (medical history, patient data (height, weight, labs, BP, etc.), legend and nonprescription medications, allergies, adverse drug reaction history, pharmacist's progress notes.

2. Daily Responsibilities:

a. Provide direct patient care by participating in the pharmacy's disease management and other patient monitoring programs. The specific processes for accomplishing this are outlined in the following sections of "Outcomes and Objectives": a) Patient Assessment, b) Drug Therapy Assessment, c) Develop, Implement, and Monitor Drug Therapy Plans, and d) Pharmacotherapy Decision Making.

1. During the rotation, 8 SOAP notes will be randomly selected for evaluation. Each SOAP note and evaluation may be placed in the student's learning portfolio.

b. Provide answers to drug information questions that arise in the pharmacy. During the rotation, a written response should be prepared for at least four questions.

1. Each of the four drug information responses and evaluation should be placed in the student's learning portfolio.

c. Provide a medication-use, disease prevention, or wellness education program to patients and caregivers in either the pharmacy or community.

1. A copy of your personal outline for the program, slides, and any handouts should be placed in the learning portfolio.

d. Give one formal Pharmacy Grand Rounds presentation during the rotation.

1. A copy of the presentation and faculty evaluation forms should be placed in the student's learning portfolio.

e. Give one formal Journal Club presentation during the rotation.

f. A copy of the presentation and faculty evaluation forms should be placed in the student's learning portfolio.

g. Implement a project or pilot a new pharmaceutical care service at the pharmacy.

1. A proposal for this project or pilot service should be initiated prior to starting the rotation. This plan should include rationale, a fiscal plan, methodology for implementation, and criteria for continuous quality improvement.

(a) Students should begin planning and discussing this project when the P4 year begins or earlier so that it can be effectively carried out during the rotation.

2. A copy of the proposal and project or pilot service activities should be placed in the student's learning portfolio.

h. Demonstrate the ability to perform basic dispensing-related procedures in the pharmacy:

1. Interpret the appropriateness of a medication order/prescription before dispensing a prescription.

2. Comply with federal, state, and local laws and related regulations.
3. Make appropriate decisions in professional practice situations which may give rise to liability under civil law.

4. Follow established policies and procedures to maintain accuracy of the patient profile.

5. Participate in the management of any medical emergencies.

i. Demonstrate effective communication skills with employees, patients, and other health care providers.

j. Make ethical decisions and exhibit professional behavior.

k. Perform self-assessments by: corroborating midpoint and final rotation self-assessment ratings with those of the instructor, perform a self-assessment of each document placed in the learning portfolio, write a reflective self-evaluation at the end of the rotation.

l. Document all patient interventions and outcomes.

Textbooks:
The student is expected to build a personal library that has text resources. The following list outlines topics of resources to be included in the personal library; the student is expected to select a specific text or reference that covers the stated topic:

- Pharmacotherapy Book/Reference
- General Drug Information Reference
- General Medicine Book/Reference
- Physical Assessment Book/Reference
- Laboratory Interpretation Book/Reference
- Pharmacokinetics Book/Reference
- Adverse Drug Reaction Book/Reference

The student is expected to be self-directed in obtaining drug literature pertinent to patient care issues. The student is expected to have Internet access in order to utilize the University and OVID Resources and conduct web searches. Some Medline databases such as Graateful Med are available free of charge from the National Library of Medicine.

Students are expected to check their email and have internet access on a daily basis.

Students must possess a beeper so that other health care professionals and the instructor can reach them within the hospital.

The instructor may assign additional required/suggested readings based on conference topics and patient care issues.
Grading and Assessment Procedures

Course Requirements and Grading Criteria:

Assessment:

Daily Performance Based on Instructor Ratings 60%

- Patient Assessment(10%); Drug Therapy Assessment(10%);, Develop, Implement and Monitor Drug Therapy Plans(15%); Communication Abilities(5%); Pharmacotherapy Decision-Making(5%); Thinking abilities(5%); Professional Ethics, Identity, and Behavior(5%); Social Interaction Citizenship and Leadership(S/U); Self-Learning Abilities(5%); Medication Use Systems (S/U)

- Midpoint Evaluation will be weighted 10% and the Final Evaluation will be weighted 50% of this section grade.

Documentation of Patient Care (8 SOAP Notes) 15%

Drug Information Responses (4) 10%

Other 15%

- Project or Pilot Implementation of a New Pharmaceutical Care Service
- Pharmacy Grand Rounds Presentation and/or Pharmacotherapy Clinical Trial Presentation

Program for Patients/Caregivers S/U

Participation in all rotation activities S/U

- The student is required to spend a minimum of 40 hours per week at the rotation site. The student is expected to be prompt in attending all rotation activities.

- Unexcused absence any rotation activities and late assignments will be deemed unsatisfactory and a failing grade may be submitted irrespective of other grades.

Grading Scale:

A = 90 - 100%
B = 80 - 89%
C = 70 - 79%
D = 60 - 69%
F < 60%

If the rotation grade is less than a C (<70%), the rotation must be repeated.

Assessment System:

This rotation is part of an abilities-based outcomes curriculum. The Auburn University School of Pharmacy, Advanced Practice Experience Manual provides specific details and policies about how students are assessed during rotations.
Policies: Specific policies pertaining to all Advanced Practice Experience rotations are found in the *Auburn University School of Pharmacy, Advanced Practice Experience Manual.*

Attendance: Students are required to be at the rotation site a minimum of 40 hours/week. As a professional, the student is expected to stay beyond the usual work hours when patient care still needs to be completed.

Special Needs: It is the policy of the Auburn University to provide accessibility to its programs and activities and reasonable accommodation for persons defined as having disabilities under Section 504 of the Rehabilitation Act of 1973, as amended, and the American with Disabilities Act of 1990.

Students should contact the Program for Students with Disabilities 1244 Haley Center, 334-844-2096 (Voice/TT) and must receive this approval before individual instructors grant any special circumstances.

Students with defined special needs should see the Director of Experiential Education at the beginning of the P4 Year so that accommodations can be scheduled. Students should also see the site instructor to make specific accommodations.