



*The* **UNIVERSITY** *of* **OKLAHOMA**  
*College of Pharmacy*

**DOCTOR OF PHARMACY PROGRAM**

**ADVANCED PHARMACY PRACTICE EXPERIENCE  
(APPE) MANUAL**

**P4 YEAR**

**2025-2026 EDITION**

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A. **APPE OVERVIEW**

The Doctor of Pharmacy Program at the OU College of Pharmacy is an ACPE-accredited entry-level Doctor of Pharmacy Program. The Advanced Pharmacy Practice Experience (APPE) program consists of the nine one-month experiences listed below, scheduled between June 2025 and May 2026.

<b>Ambulatory Care APPE</b>	<b>1 month</b>
<b>Community Pharmacy APPE</b>	<b>1 month</b>
<b>Inpatient Adult Patient Care APPE*</b>	<b>1 month</b>
<b>Hospital Pharmacy APPE</b>	<b>1 month</b>
<b>Clinical Pharmacy APPE<sup>†</sup></b>	<b>1 month</b>
<b>Elective APPE<sup>‡</sup></b>	<b>4 months</b>

\* The Inpatient Adult Patient Care APPE requirement can be fulfilled by rotations in either Adult Medicine (PHAR 7004) or Critical Care (PHAR 7034).

† The Clinical Pharmacy APPE requirement can be fulfilled by the following rotations: Clinical Pharmacy (PHAR 7644), Adult Medicine II (PHAR 7014), Critical Care (PHAR 7034), Ambulatory Care II (PHAR 7030), or Pediatrics (PHAR 7064).

‡ Elective rotation options include Research (PHAR 7090), Elective-Non Patient Care (PHAR 7094), Elective-Patient Care (PHAR 7664), Nuclear Pharmacy Patient Care (PHAR 7654), or additional months of adult medicine, ambulatory care, critical care, community, hospital, or clinical pharmacy APPEs depending on availability. Elective areas of study are selected by students based on individual preferences and include diverse specialties such as poison and drug information, specialty, infusion, compounding, managed care, administrative, research, and long-term care pharmacy. A maximum of two rotations in the non-patient care setting (PHAR 7090 and 7094) can be counted toward the Pharm.D. degree requirements.

B. **ARTIFICIAL INTELLIGENCE, PLAGIARISM, AND ACADEMIC MISCONDUCT**

Unless otherwise instructed, students shall work independently on all rotation activities. Any student caught cheating on any activity will receive an unsatisfactory grade (0%) for the course and be investigated per University academic misconduct policy. Lack of integrity is not tolerated in our profession.

**Artificial Intelligence (AI) Use:** Learning to work with AI tools is an emerging skill, and some rotations may ask you to use AI Tools. However, the use of AI tools (unless specified by the preceptor that AI is needed to complete a rotation project, assignment, assessment, or presentation) is STRICTLY PROHIBITED. Using AI to produce content for rotation projects, assignments, and assessments is a violation of the academic misconduct policy and can result in a 0 on the assignment and up to an unsatisfactory grade for the rotation.

**Plagiarism:** The act of stealing and passing off the ideas or words of another author as one's own or using a created production (e.g., journal article or tertiary reference source) without crediting the source will constitute an unsatisfactory grade (0%) for the course and be investigated as academic misconduct per University policy. Students should contact their instructor for assistance on how to prepare a report rather than risk failing the course because of plagiarism. See Appendix O for additional information on what plagiarism is and how to avoid it.

**Academic Misconduct Policy:** The University policies regarding academic misconduct will be strictly enforced. Students suspected of academic misconduct will be reported to the College of Pharmacy Dean's Office in accordance with these policies. Please consult the University regulations and policies in the Student Handbook for discussion of academic misconduct and the penalties that it may incur: <https://pharmacy.ouhsc.edu/current-students-residents/student-handbooks>

C. **ATTENDANCE AND ABSENCES**

Unless otherwise instructed, students begin a rotation on the first working day and end on the last working day of the month. Students are required to attend all working days of the month or as arranged by the primary preceptor with approval of the Director of Experiential Education. Exceptions to this include observed holidays (see Calendar of Events), unless otherwise instructed by the primary preceptor in conjunction with the Director of Experiential Education. Rotation credit requires a minimum of 160 hours of contact per month. Additionally, students must continue to be present all working days through the last day of the month even if 160 hours have been reached.

Rotation hours will be set by the supervising preceptor(s). Students must be available during these hours and refrain from requests to modify schedules to meet their personal needs unless approved by the Office of Experiential Education. There is no standard lunch or break time during rotations. The student should go to lunch at the most appropriate time in light of their activities. A documented medical need to maintain a specific meal schedule should be communicated to and approved by the supervising preceptor(s). Attendance and/or participation by the student in clinical activities (e.g., rounds, on-call times with patient care teams, medical conferences, medication rounds, nursing report, and patient interviews) will be by arrangement with the preceptor or invitation by a hospital staff member, with approval by the preceptor. If a student must leave an assigned area, a message must be left for the preceptor indicating the student's whereabouts.

Tardiness will not be tolerated. The student may be required by the preceptor or Director of Experiential Education to complete an extra rotation day for tardiness. Repeated tardiness on any single or between multiple rotation(s) may result in dismissal from a rotation and an unsatisfactory grade (0%) with subsequent re-enrollment in the course.

Students are also responsible for all travel, housing, and related expenses unless otherwise specified. Overnight or out-of-state travel with an assigned preceptor must be known by and communicated to the Office of Experiential Education to ensure appropriate documentation prior to travel.

Students cannot receive compensation for any experiential coursework, nor be assigned to the same practice area within a site of current employment.

Students must attend all working days of each rotation month. Any variance in attendance requires communication with and approval by the Director of Experiential Education, plus approval by the primary preceptor or designee, as specified in this section. Students must expect to make up time missed due to absences according to directions from the assigned preceptor(s) and Office of Experiential Education.

- **Faculty rotations (unanticipated absences):** For rotations conducted by full-time college faculty, direct communication with and approval by the faculty member is appropriate according to the guidelines specified for the rotation. Unexcused absences will not be tolerated. An unexcused absence may result in an unsatisfactory grade (0%) and require subsequent re-enrollment in the course.
- **Adjunct faculty rotations (unanticipated absences):** For rotations conducted by adjunct faculty members of the college, the student must communicate via telephone directly to the primary preceptor or designee on the day of the absence. In addition, the student must communicate via telephone directly to the Office of Experiential Education on the day of the absence. E-mail is not an acceptable form of communication to obtain an excused absence. Approval by the preceptor without approval by the Office of Experiential Education does not constitute an excused absence. Unexcused absences will not be tolerated. An unexcused absence may result in an unsatisfactory grade (0%) and require subsequent re-enrollment in the course.
- **Anticipated absences (e.g., scheduled medical appointments, personal requests):** The student must seek approval for anticipated absences prior to the missed session. P4 students on any rotation should first submit an absence request in Absences Request Tracking tab on CORE ELMS and include a detailed explanation for the requested absence. For rotations conducted by full-time faculty of the college, students must gain approval from the faculty member according to their guidelines. For rotations conducted by adjunct faculty members, approval must first be considered by the Director of Experiential Education. If approval is given by the Director of Experiential Education, students will be directed to communicate with the primary preceptor or designee, and approval will be at their discretion. Failure to adhere to these guidelines can result in an unexcused absence. An unexcused absence may result in an unsatisfactory grade (0%) and require subsequent re-enrollment in the course.
- **College-approved attendance at meetings:** Professional development activities through attendance at local, regional, and/or national meetings remains important during the P4 year, but presents challenges to completion of experiential hours and learning objectives, and therefore, must be carefully planned. Excused absences cannot be uniformly assured depending on circumstances.

P4 students must follow college policies for approval of student-related travel. Faculty advisors of organizations must submit P4 student names for approval through Student Affairs per usual policy. All students must ensure that the Director of Experiential Education is aware of interest and seek approval in writing a minimum of 8 weeks prior to the start of the rotation month in which a meeting occurs (e.g., for a meeting in December, send a message by October 1). Communication with the Director of Experiential Education must precede contact with the primary preceptor for the assigned rotation. Meetings that are not consistent with those usually available to the student body may not be approvable and students must seek clarification as needed.

- **Inclement weather:** If the campus in which your rotation program originates is closed due to inclement weather, on-site rotation activities are also cancelled for the same timeframe. Students must be in contact with their primary preceptor/practice site on a daily basis to confirm they will not be attending on-site rotation activities when campuses are closed due to inclement weather. Students should study from home on inclement weather days working on preparing for or completing any preceptor assignments/meetings, required exams, rotation projects, or NAPLEX/MPJE preparation (e.g. Rx Academy) (listed in order of priority).
- **Residency interviews or other activities requiring significant time off rotation:** Students must anticipate that any activities requiring significant time off rotation may not be compatible with successful completion of the experiential hours and learning activities necessary to grant course credit. Such situations are best managed by not scheduling a rotation while completing these activities, and failure to communicate with the Director of Experiential Education regarding significant conflicts during a month may require actions such as withdrawal from a rotation with subsequent need for a later enrollment.
- **Excused absences will require that missed rotation time be completed prior to the end of the rotation, unless otherwise directed or approved.** In the instance of illness, students may be required to provide written justification signed by the appropriate health professional treating the individual unless otherwise specified.

#### D. CALENDAR OF EVENTS AND OBSERVED HOLIDAYS

For the 2025-2026 academic year, the schedule for required rotation exams, P4 meeting, and observed holidays includes:

Juneteenth Holiday	June 19, 2025
Required Rotation Standard Exams	June 24, 2025, 3:00–4:15 PM
Independence Day Holiday	July 4, 2025
Required Rotation Standard Exams	July 29, 2025, 3:00–4:15 PM
Seminar Conference	August 15, 2025, 8:00 AM-5:00 PM
Required Rotation Standard Exams	August 26, 2025, 3:00–4:15 PM
Labor Day Holiday	September 1, 2025
Required Rotation Standard Exams	September 30, 2025, 3:00–4:15 PM
Required Rotation Standard Exams	October 28, 2025, 3:00–4:15 PM
Required Rotation Standard Exams	November 25, 2025, 3:00–4:15 PM
Thanksgiving Holiday	November 27-28, 2025
Required Rotation Standard Exams	December 23, 2025, 3:00–4:15 PM
Christmas Holiday	December 25, 2025
New Year’s Day Holiday	January 1, 2026
Seminar Conference	January 16, 2026, 8:00 AM-5:00 PM
Martin Luther King, Jr. Day Holiday	January 19, 2026
Required Rotation Standard Exams	January 27, 2026, 3:00–4:15 PM
Required Rotation Standard Exams	February 24, 2026, 3:00–4:15 PM
Required Rotation Standard Exams	March 31, 2026, 3:00–4:15 PM
P4 Class Meeting (mandatory)	March 31, 2026, 4:15-5:45 PM
Required Rotation Standard Exams	April 28, 2026, 3:00–4:15 PM
Memorial Day Holiday	May 25, 2026
Required Rotation Standard Exams	May 28, 2026, 3:00–4:15 PM
State Board of Pharmacy meeting	As assigned by the Office of Experiential Education
Financial Aid Exit Interviews	Date and Time TBA
Graduation/Commencement	Date and Time TBA

## E. CELL PHONES

We recognize that cell phones have become an integral part of everyday life. While they can be great assets when used correctly (e.g. for drug information apps, calendars, school email, etc.), they may also cause problems when used imprudently or excessively and reflect lack of engagement and unprofessional behavior. The following is the policy for cell phone use on APPE rotations:

- Cell phone use during rotation hours is prohibited.
- Cell phones should always be silenced and out-of-sight during rotation hours.

Exceptions will be allowed for brief cell phone access for the following:

- Emergency calls or urgent messages.
- Drug information apps or tools relevant to rotation.
- Two-factor identification needed to access OUHS and other health-systems' resources (e.g. Imprivata ID, PingID)
- In all the above cases, the student should communicate with their preceptor when their cell phone is used for such purposes.

## F. COEPA, OU COLLEGE OF PHARMACY EDUCATIONAL OUTCOMES, AND APPE OBJECTIVES

The Doctor of Pharmacy degree program provides scope and depth in the pharmaceutical sciences and clinical sciences. Increased proficiency obtained during the Doctor of Pharmacy program will enable a pharmacist to provide high-quality care.

The rotations are designed to enable the doctoral student to learn, build competence, and gain experience in various health care settings under the supervision of clinical and adjunct faculty members who serve as the student's preceptors and mentors. Rotation objectives for required am care, adult medicine/critical care, community, and hospital APPEs are in Appendix S. Completion of the rotation courses will help prepare the doctoral level student to practice the profession of pharmacy at an advanced level.

Our program outcomes are performance-directed, and the student should be able to satisfactorily perform most or all of these regardless of the practice environment. At the end of all rotation courses in the final year of the Doctor of Pharmacy program, graduates should be able to complete entrustable professional activities (EPAs) and meet educational outcomes as follows:

<b>Curricular Outcomes</b>	<b>Entrustable Professional Activities</b>
Scientific thinking	Collect information necessary to identify a patient's medication-related problems and health-related needs.
Problem solving skills	Assess collected information to determine a patient's medication-related problems and health-related needs.
Communication	Create a care plan in collaboration with the patient, others trusted by the patient, and other health professionals to optimize pharmacologic and nonpharmacologic treatment.
Cultural and structural humility	Implement a care plan in collaboration with the patient, others trusted by the patient, and other health professionals.
Person-centered care	Monitor and evaluate the safety and effectiveness of a care plan.
Advocacy	Educate the patient and others trusted by the patient regarding the appropriate use of a medication, device to administer a medication, or self-monitoring strategies.
Medication-use process stewardship	Deliver medication or health-related education to health professionals.
Interprofessional collaboration	Answer medication-related questions using scientific resources, including primary literature
Population health and wellness	Contribute patient-specific medication-related expertise as part of an interprofessional team.
Leadership	Fulfill a medication order.
Self-awareness	Perform the technical, administrative, and supporting operations of a pharmacy practice site.
Professionalism	Identify populations at risk for prevalent diseases and preventable adverse medication outcomes.

## G. CREDENTIALING REQUIREMENTS

Students must review all site-related information posted in CORE ELMS for all assigned rotations once schedules are available and upon any rotation change; students shall be accountable for all related directions and requirements. The following credentialing requirements must be uploaded in CORE ELMS and Complio prior to attending the first APPE and kept updated throughout the P4 year. Affiliated sites may require verification of the below requirements and may have additional credentialing requirements that must be met prior to beginning a rotation. Students shall be responsible for reviewing directions on CORE ELMS for all sites immediately upon availability of schedules in order to determine required credentials and the timing required to meet specified deadlines. Some practice sites may require such credentials to be completed 30 to 60 days prior to the start of a rotation or even 30 to 60 days prior to the start of the semester in which the rotation is scheduled. Students are responsible for responding to the college and/or practice site with respect to credentials required and risk suspension from rotations for non-adherence to requirements. Students are responsible for related expenses and providing the credentials to sites as required.

### Documentation

#### CORE ELMS

1. APhA pharmacy-based immunization delivery certificate (one time requirement)
2. CPR card (required to be updated every 2 years)
3. CV/Resume (update annually)
4. OU COP CSP Assessment (end of P2 and P3 spring semesters, uploaded by Experiential Office)

#### Complio (American Databank)

1. Background Check (annual requirement, coordinated through Student Affairs)
2. COVID Vaccine Documentation (upload a copy of your most recent dose)
3. Influenza Vaccine Documentation (documentation of the current season influenza will need to be uploaded by October 31<sup>st</sup> of current academic year)
4. OUHS Bloodborne Pathogen Training (annual requirement through <https://onpoint.ouhsc.edu/>)
5. OUHS HIPAA Privacy and Security Training (annual requirement through <https://onpoint.ouhsc.edu/>)
6. OUHS Tuberculosis Awareness Training (annual requirement through <https://onpoint.ouhsc.edu/>)
7. Professional Liability Insurance (annual requirement)
8. Tdap Vaccine Documentation (every 10-year requirement)
9. Tuberculosis Screening (annual requirement)

## H. DRESS CODE

Students are expected to exhibit a professional appearance in dress, hygiene, grooming, and demeanor and to adhere to the standards of dress and behavior specified by the primary preceptor. These standards should be identical to those required of all pharmacy staff at the practice site. White jackets of the blazer type are to be always worn while in the clinical area unless another dress code is set by the preceptor. Business casual is the appropriate standard of dress for individuals in most pharmacy environments. It is recognized that individuals participate in various pharmacy environments and that these environments may have additional dress requirements (e.g. scrubs) that must be adhered to while at the site. Denim jeans are inappropriate dress. Revealing attire is inappropriate dress. Sandals are generally not appropriate. It is important to always project a professional image.

Official OUHS photo ID name tags revealing the student's name and academic status (e.g., College of Pharmacy, Doctor of Pharmacy Student) must be always worn at the rotation site. In addition, pharmacy interns should wear a designation tag and be distinctly identifiable from a practicing pharmacist, according to Oklahoma State Pharmacy law.

## I. ELECTRONIC HEALTH RECORDS

Electronic health records (EHRs) are to be reviewed only in assigned areas (e.g. patient care unit, secure terminals). Students must graciously surrender access to a patient's EHR and/or workstations during the time they are reviewing it if some other health professional has need for it. After EHRs are reviewed, ensure you have logged out of the electronic system to prevent access to your account. Do not share your log-in credentials.

Do not download or transfer EHRs unless required by the practice site, in which case protected health information (PHI) may be downloaded only to encrypted devices and transferred only via secure transmission. Document information in a patient's HER according to each institution's policy and only as directed by your preceptor.

The University of Oklahoma complies with all federal and state laws related to the confidentiality of patient and research participant medical information, including the Privacy and Security Regulations issued pursuant to the Health Insurance Portability and Accountability Act (HIPAA). Students are required to comply with these laws and related University policies and procedures, including the HIPAA Privacy and Security policies <https://hipaa.ouhsc.edu/Policies>. Students are required to complete the University's mandatory annual HIPAA training at <https://onpoint.ouhsc.edu/>. Students must also comply with the related policies and procedures of their departments and any facilities in which they rotate.

Students are prohibited from accessing or creating PHI through systems outside of the virtual desktop infrastructure (VDI), and they shall not store any PHI locally on an unencrypted device (e.g. laptops, desktops, cell phones) or in unencrypted storage locations (e.g. clouds, servers, local drives). If a student anticipates they will need to access PHI outside the VDI or store PHI locally on their device, the device must be encrypted. Personally-owned devices used to access PHI outside the VDI or store PHI locally on the device must be reported to the OU College of Pharmacy. Students are required to acknowledge their understanding of the HIPAA Workstation Policy, which is located at <https://hipaa.ouhsc.edu/Portals/1412/Assets/Documents/Policies/WorkstationPolicy-7-22-22-final.pdf>.

#### J. **EMAIL COMMUNICATIONS**

Students are responsible for checking and responding within 72 hours to e-mail received from the college to facilitate normal operations. Any student unable to comply with this policy secondary to interrupted e-mail service must provide advance notice to the Office of Experiential Education. Students failing to respond to e-mail within 72 hours will be sanctioned according to applicable University policies, including the OUHS Student Professional Behavior in an Academic Program policy. Sanctions can include but are not limited to suspension of progression in the experiential program.

Students must comply with the College of Pharmacy Electronic Mail (Email) Usage Policy effective March 1, 2017 (below), University HIPAA policies, and IT Security policies. The purpose of the policy is for compliance, security, and efficient support services when conducting College of Pharmacy business via email. The intent of the internal policy is to complement OUHS's Acceptable Use of Information Systems Policy (<https://ou.edu/ouit/cybersecurity/policies>) and related IT Security and HIPAA policies. This College of Pharmacy policy applies to all email sent or received in the scope of employment at or training in the College or in the conduct of approved College or University business. All University of Oklahoma College of Pharmacy faculty, staff, students, and trainees are responsible for compliance with this policy and complete OnPoint training annually. The policy is as follows:

- College of Pharmacy email may not be automatically forwarded or re-directed to a non-University provided or non-University approved email service.
- If confidential or sensitive OUHS information must be transmitted over an external network (e.g., the Internet), it must be encrypted. Encryption options include typing [secure] in the email subject line, using the Proofpoint Secure Email plug-in for Outlook, or sending via a secure patient portal. (For sending PHI via email generally, refer to the HIPAA Safeguards policy or contact IT Security.)
- Users may send confidential or sensitive information via encrypted email from OUHS email accounts and only to authorized recipients for authorized purposes. PHI may be sent only for treatment, payment, or operations purposes and to third parties with whom the University has a Business Associate agreement in place.
- Individuals must not send, forward, auto-forward, re-direct, or receive confidential or sensitive OUHS information through non-OUHS email accounts. Examples of non-OUHS email accounts include, but are not limited to, Gmail, Cox mail, Hotmail, Yahoo mail, AOL mail, and email provided by other Internet Service Providers.
- Email messages that contain confidential or sensitive OUHS information, such as PHI or regulated data, must include a confidentiality notice at the end of the correspondence, such as:

*CONFIDENTIALITY NOTICE: The information contained in this message, including any attachments, is for the sole use of the intended recipients(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, distribution, or retention is strictly prohibited. If you are not the intended recipient, of believe you received this message in error, please notify the sender immediately by reply email and delete the original message.*

**K. EXAMS**

Standard exams are administered by the Office of Experiential Education for 4 core rotations (adult medicine/critical care, ambulatory care, community, hospital). Exam objectives are posted to the CORE Document Library for each rotation type. Students will use ExamSoft/Examplify for their required examinations. Students must adhere to the Testing Expectations and Reminders for all OU-COP Exams (Appendix T). Exams will be administered at the OU College of Pharmacy in Oklahoma City. The exam schedule is listed under the Calendar of Events (page 5). When a student is on a core rotation greater than 1 hour distance from the OKC campus, the primary preceptor may serve as an exam proctor provided their rotation site can accommodate a quiet space with low distractions. A make-up exam will be given only if the student has an excused absence or a written medical excuse, unless otherwise specified.

**L. GRADING**

Experiential rotations are four credit hour courses and each provides a minimum of 160 contact hours towards licensure, unless otherwise specified. The satisfactory completion of a rotation requires substantial self-motivation by the student. The minimum scheduled activities, with mandatory attendance, for the rotations are:

1. Rotation site activities
2. Preceptor meetings
3. Exams, presentations, and/or projects

The student will be evaluated by the preceptor at least twice during the rotation based on subjective and objective components. The evaluation will be conducted using the "OU/SWOSU APPE Evaluation" (Appendix A). The OU/SWOSU APPE Evaluation will comprise 70% of the total course grade. Objective assessments will comprise 30% of the total course grade. Individual preceptors and/or experiential education personnel may administer oral and/or written assessments and will provide specific descriptions of grading components for each rotation. Students may be assessed with both a written examination of knowledge and a performance-based assessment of skills. A standard exam for knowledge assessment will be required for adult medicine/critical care, ambulatory care, community, and hospital core rotations.

**Grading Composite Summary**

Successful completion of each rotation course requires acceptable completion of all required tasks. Grading for each rotation course will be "Satisfactory" or "Unsatisfactory." An overall total score of at least 70% will be required for the course with a grade of 70% also required for each rotation component (i.e., a grade of at least 70% for the rotation experience, at least 70% for an oral assessment, and at least 70% for a written assessment) for a grade of "Satisfactory." The APPE grading form is in Appendix B. Grades will be determined by individual faculty preceptors or adjunct faculty preceptors in conjunction with experiential education personnel. In addition to inadequate performance on a grading component, loss of credit (0%) and an unsatisfactory grade for a rotation may occur as a result of (but is not limited to) an unexcused absence, tardiness, unprofessional conduct, lack of professionalism (including poor work ethic), academic misconduct, and/or a violation of HIPAA.

The rotation grade is generally composed of:

	Total Score	Weighting for APPE Grade	APPE Grade
Rotation experience grade (from OU/SWOSU APPE Evaluation)	100 points possible	70%	70 points possible
Objective assessment (from standard exam or project with/without additional assessments as assigned by preceptor)	100 points possible	30%	30 points possible

\*Includes satisfactory demonstration of professional behaviors and attitudes.

## Grading for Experiential Courses (Unless Otherwise Specified by Policy)

**Satisfactory (S):** students achieving  $\geq 70\%$  on every individual assessment and therefore a cumulative assessment of  $\geq 70\%$ , including satisfactory demonstration of professional behaviors and attitudes, will be assigned a grade of Satisfactory.

**Unsatisfactory (U):** students achieving a cumulative assessment of less than 70% in any experiential course will be assigned a grade of Unsatisfactory. Upon receipt of one Unsatisfactory grade, the student will be placed on academic probation, and progression in the program may be halted as the student may be required to undergo psychosocial and/or cognitive assessment prior to determination of an appropriate course of action to move forward in the professional program. Upon receipt of two Unsatisfactory grades in different experiential courses, progression will be halted, and the student may be required to undergo psychosocial and/or cognitive assessment prior to determining an appropriate course of action to move forward in the professional program. A student who receives two Unsatisfactory grades in the same experiential course may be subject to dismissal.

Students who do not meet specified deadlines for initial project approval and final project submission and/or failure to conform to project guidelines for any type of elective rotation may also be assigned a grade of Unsatisfactory.

Students achieving a score of less than 70% on the required adult medicine/critical care, am care, community, and/or hospital core examinations will be assigned a grade of Unsatisfactory. Students receiving an associated Unsatisfactory grade will be required to repeat the respective adult medicine/critical care, am care, community, hospital, and/or elective APPE course, and be responsible for all related tuition, fees, and other related expenses.

**Unsatisfactory (U), potential for remediation:** except for the required adult medicine/critical care, am care, community, and hospital rotations, students achieving less than 70% in any individual area of the assessment despite a cumulative assessment of  $\geq 70\%$  may be assigned an initial grade of Unsatisfactory by their faculty preceptor or adjunct faculty preceptor in conjunction with the Director of Experiential Education. Dependent on the area(s) of weakness, options for remediation may be considered. Remediation will be determined individually, taking into consideration factors impacting student performance provided from any psychosocial and/or cognitive assessments. The experiential faculty or Director of Experiential Education may decline to offer remediation and the initial grade of Unsatisfactory will stand, requiring that the student repeat the experiential course. If remediation is offered, a written plan must be presented by the preceptor to the student and Director of Experiential Education, including specific activities and criteria to be completed to eliminate the deficiency. According to remediation policy, reassessment and retesting may be structured using methods identical to the original course or may employ an entirely different method of assessment. The threshold for passing the assessment(s) must be set and clearly communicated to the student. If remediation is successful, the initial grade of Unsatisfactory may be changed to Satisfactory, otherwise the initial grade will stand. A student who successfully remediates an experiential course, but fails to show satisfactory progress in subsequent rotations after probation may be subject to dismissal. Students who are remediating will be responsible for all related expenses in conjunction with course enrollments.

**Incomplete (I):** a temporary grade used when a student, for reasons acceptable to the preceptor and Director of Experiential Education, is unable to complete identifiable requirements of a course and cannot be assigned any other grade. Documented illness or extenuating circumstances is required. A plan from the preceptor for the student to complete the course within appropriate time limitations is required.

**Withdrawal (W):** indicates a student was enrolled in the course but withdrew with permission of the preceptor and Director of Experiential Education. A "W" may be assigned when a student has satisfactory performance at the time of the withdrawal. However, a student who is permitted to withdraw from a course with unsatisfactory performance will instead receive a grade of Unsatisfactory. A student receiving a "W" or "U" in this manner will be required to complete another experiential course. Any additional enrollment required due to an Unsatisfactory grade may generate additional tuition, fees, and other related expenses for the student, will be scheduled according to the discretion of the Director of Experiential Education, and may delay graduation date.

## **Academic Standings Policies (for reference, policies effective upon P1 admission apply)**

### Probation

- A student who receives one unsatisfactory grade in an experiential course during the P4 professional year will be placed on academic probation.
- Upon receipt of one unsatisfactory grade in an experiential course, progression in the professional program may be halted and, depending on facts and circumstances, the student may be required to undergo psychosocial and/or cognitive assessment prior to determination of an appropriate course of action to move forward in the professional program.
- Upon receipt of two unsatisfactory grades in different experiential rotations, progression will be halted and, depending on facts and circumstances, the student may be required to undergo psychosocial and/or cognitive assessment prior to determining an appropriate course of action to move forward in the professional program.

### Academic Dismissal

- A student who successfully remediates an experiential course, but fails to show satisfactory progress in subsequent rotations after probation may be subject to dismissal.
- A student who receives two unsatisfactory grades in the same experiential course may be subject to dismissal.

### Completion of Curriculum

- Satisfactory completion of all required and elective rotations is required to progress in the P4 experiential year.
- The Doctor of Pharmacy is a four-year professional program. Students must complete the curriculum within five years of the date of initial enrollment into the College of Pharmacy or will be dismissed from the program.

### Experiential Performance Review and Assessment

- To expedite review of unsatisfactory performance in P4 experiential courses, performance and progress will be assessed by individuals including the chair of the Academic Standing Committee, the Associate Dean for Student and Academic Affairs, Associate Dean for Professional Programs, and the Director of Experiential Education.
- Unsatisfactory performance situations will be assessed within one week of receiving notification of an unsatisfactory grade.

## **M. IMMUNIZATIONS AND INFECTION CONTROL**

All students must have proof of required immunizations or approved declinations by OUHS Student Health documented in Complio, including measles-mumps-rubella, tetanus-diphtheria-pertussis, polio, hepatitis B, varicella, influenza, and COVID-19 vaccination.

**Immunization Declinations:** Even if the University accepts a student's declination, external rotation sites each have their own vaccination requirements. If a student is prohibited from rotating at an external site due to the student's vaccination status, the student's academic progress may be hindered. If after reasonable efforts, an appropriate rotation site cannot be found to meet the student's academic requirements, the student may not be able to complete the requirements of their academic program and may be unable to graduate.

Students must also comply with the communicable disease policies for mask wearing, screening, and isolation in accordance with the external facility where the rotation is located as well as the OUHS.

## **N. INSURANCE REQUIREMENTS**

All Doctor of Pharmacy students enrolled in APPEs must maintain malpractice insurance and health insurance. This is in the best interest of the student, and a requirement of affiliation agreements between the College of Pharmacy and select experiential practice sites. The student must show proof that they are insured before being allowed to enter rotation sites.

Needle stick insurance is strongly recommended and available as a separate policy through the Academic Health Plan's insurance company at <https://onhsc.myahpcare.com>, if not already a component of the student's current health insurance plan. Those students who have health insurance outside of the student

health insurance plan should check with their insurance carrier to see if their current policy includes needle stick coverage. If this is not included in the benefit, it is strongly recommended to purchase a separate needle stick policy through the Academic Health Plan.

**O. INTERN LAWS**

Interns must always have their intern license with them on APPE assignments. Interns shall conspicuously display in their pharmacy training area the intern certificate provided by the Oklahoma Board of Pharmacy.

Students must adhere to the laws and regulations which govern the practice of pharmacy at the practice site, including 535: 10-3-1.1 Rules of Professional Conduct, see <https://oklahoma.gov/pharmacy/laws-rules.html> and seek clarification when needed. Any questions should be immediately directed to the Office of Experiential Education.

**Intern Practice Requirements (From the Oklahoma Pharmacy Law Book, 535:10-5-4)**

(a) Supervision requirement. An intern may practice in an approved training area only under the immediate visual supervision of a preceptor, except as described in 535:10-5-4-(a). See also 535:10-5-2.

- (1) A preceptor may supervise only one intern at a time.
- (2) A ratio of 1 faculty preceptor with up to 2 interns will be allowed in experiential rotations.
- (3) Non-dispensing experiential rotations are to be supervised by a preceptor, but immediate visual supervision is not required.
- (4) An intern may not be on duty in any capacity without a licensed pharmacist preceptor on site and supervising the intern.

**P. NEEDLESTICK**

In the event of an accidental blood exposure, students should promptly report the incident to their primary preceptor AND the Director of Experiential Education and immediately access further information of required actions via student health websites according to campus (Oklahoma City - <http://students.ouhsc.edu/SHWC.aspx> and Tulsa - <http://www.ou.edu/tulsastudentaffairs/health>).

**Q. OUTSIDE COUREWORK**

Students desiring to take coursework during the P4 professional year beyond the required curriculum (PHAR 7970 Seminar in Pharmacy Practice and nine experiential courses), must make a request in writing to the Director of Experiential Education at least 3 months in advance of the start date for this desired coursework. Decisions about these requests are based on academic standing, academic performance, and potential impact on required coursework, including scheduling conflicts. If additional elective coursework is approved, scheduling of all experiential coursework (arrival/departure times) will be determined by the Office of Experiential Education. Students who independently request alteration of their experiential coursework schedule through a preceptor for the purpose of attending elective course activities are out-of-compliance with this policy and may be suspended from the rotation program.

**R. P4 ORIENTATION REQUIRED FORMS**

The following forms should be reviewed and submitted immediately upon completion of P4 Orientation. Students will not be able to begin APPE assignments until all these signed forms are received.

- P4 APPE Manual 2025-2026 Policy Acknowledgement of Understanding
- HIPAA Acknowledgement of Understanding
- Student Consent to Release Education Records to Rotation Sites
- Student Access Request for OU Health

**S. PORTFOLIOS**

Students must maintain a portfolio and provide access to preceptors and/or experiential office personnel as required. Student portfolios must be completed as specified in written and/or electronic form and submitted for verification prior to the college reporting of experiential hours required for licensure.

Throughout rotations, students will carry their red experiential folder with them daily containing their intern license, emergency contact sheet, and rotation log. Students must complete the APPE log for each rotation month including obtaining a pen-and-ink signature from the preceptor (Appendix C).

If a rotation is completed virtually, the student can request an electronic APPE log addendum form from the Office of Experiential Education.

The following outlines the field encounter requirements and deadlines for documentation in CORE ELMS for each rotation type. Please refer to Appendix S for each course's outcome statements for specific rotation requirements. Refer to Field Encounter Summary Table for details for case log requirements for each rotation type (Appendix L). Though patient-related activities are required for the portfolio, students must safeguard privacy and not include confidential PHI. Students should enter a minimum of 100 and a maximum of 170 field encounters in total for the P4 year. Adherence to minimums and maximum number of field encounters is expected.

Field Encounters*	Adult Med/ Critical Care	Am care	Clinical	Community	Hospital	Elective	BOP meeting
<b>Pre-APPE self-evaluation</b> • due 7 days before APPE start	X	X	X	X	X	X	
<b>Project</b> • topic due by 5 <sup>th</sup> working APPE day • project due by the last APPE day • see Appendix M			X <sup>†</sup>			X <sup>†</sup>	
<b>Case logs</b> • due by the last APPE day	10-20	10-20	10-20	15-30	10-20	5-15	
<b>PPCP/SOAP</b> • due by last APPE day	1-2	1-2	1-2				
<b>Journal club summary</b> • due by last APPE day	0-2	0-2	0-2				
<b>Checklist</b> • print first day of month for discussion with preceptor and completion during APPE • due by last APPE day				X <sup>‡</sup>	X <sup>§</sup>		
<b>Journal</b>							X
<b>Preceptor evaluation</b> • due by last APPE day • see Appendix P	X	X	X	X	X	X	

\*All field encounters should be documented in CORE ELMS

<sup>†</sup>Project is required for clinical and elective APPEs conducted by non-faculty, adjunct preceptors

<sup>‡</sup>Community I, II & III rotations have individualized checklists and should be completed over the rotation month

<sup>§</sup>Hospital I and II APPEs have individualized checklists and should be completed over the rotation month

#### T. PRECEPTOR EXPECTATIONS, RESPONSIBILITIES, AND AUTHORITY

While at the rotation site, students will be responsible to designated preceptors for assignments and supervision. Preceptors hold this authority by their appointment as faculty members or adjunct faculty members. Orientation to the rotation site will be the responsibility of the preceptor. Additional preceptor responsibilities are outlined in Appendix Q. Preceptors can use the rubric examples in Appendix D through K for evaluating assignments, and students may use these rubrics as guidelines for pertinent assignments. Students must inform the college if an assigned preceptor is either a relative or personal friend.

#### U. PROFESSIONAL EXPECTATIONS

Students must contact preceptors at least seven (7) days prior to the start date of each rotation.

Students should be aware that the primary objective of this P4 experiential program is learning, and that learning is not a passive process but requires a sincere personal commitment.

Students are expected to adhere to professional standards in dissemination of any verbal, written, or electronic information regarding criticism of the rotation site and/or conflicts with personnel. Any disagreements should be discussed privately with the preceptor and/or the Office of Experiential Education. At no time should other students or pharmacy personnel be involved in personal disputes.

Students are obligated to respect any and all confidences revealed during the rotation including pharmacy records, pricing systems, professional policies, and patient information.

The student should utilize discretion in communications with all persons involved in their training, including pharmacists, physicians, other health professionals, and patients. NO TOLERANCE will be given for failure to adhere to professional standards in following appropriate channels of authority regarding any matters pertaining to the rotation experience. The student should use their own good judgment in asking questions of the staff to avoid disruption of normal patient services. In high workload situations, students are requested to reserve their questions for the supervising preceptor(s). At no time may a pharmacy student take the initiative to interpret and subsequently report opinions to patients or their relatives concerning the patient's pathology or treatment in the absence of and/or without the knowledge of their pharmacy preceptor. Such unilateral action can be psychologically damaging to family and patients and may jeopardize harmonious working relationships with the health care team. Violation of this policy shall result in dismissal from the rotation.

Under no circumstances shall any medications, patient EHR, or equipment be taken by a student from a patient care area or practice site. Under no circumstances shall a student download unapproved programs and/or modify the computer settings for a computer which is the property of the practice site. Violation of these policies shall result in the dismissal of the student from the rotation.

Unprofessional conduct will result in disciplinary action, including dismissal from the rotation. Any problems arising from student contact with patients or staff members during the assignment period must be reported to the preceptors in charge of the rotation.

Dismissal from the rotation will result in an unsatisfactory grade and be managed according to experiential grading/academic standings policies.

V. **SELECTED PHARMACY ROTATION DESCRIPTIONS FROM COURSE CATALOG**

**PHAR 7004 Adult Medicine I Rotation**

4 hrs.

Supervised clinical practice experience involving the analysis of pharmacotherapeutic and pharmacokinetic applications, evaluation of drug utilization, and synthesis of rational drug regimens in the context of adult medicine.

**PHAR 7010 Community Pharmacy Rotation**

4 hrs.

Supervised clinical practice experience in community pharmacy with emphasis on the distributive and managerial aspects of pharmaceutical care.

**PHAR 7020 Hospital Pharmacy Rotation**

4 hrs.

Supervised clinical practice experience in hospital pharmacy with emphasis on the distributive and managerial aspects of pharmaceutical care.

**PHAR 7024 Ambulatory Care I Rotation**

4 hrs.

Supervised clinical practice experience involving the analysis of pharmacotherapeutic and pharmacokinetic applications, evaluation of drug utilization, and synthesis of rational drug regimens in the context of ambulatory care.

**PHAR 7034 Critical Care Rotation**

4 hrs.

Supervised clinical practice experience involving the analysis of pharmacotherapeutic and pharmacokinetic applications, evaluation of drug utilization, and synthesis of rational drug regimens in the context of critical care.

**PHAR 7644 Clinical Pharmacy Rotation**

4 hrs.

Supervised clinical practice experience involving the analysis of pharmacotherapeutic and pharmacokinetic applications, evaluation of drug utilization, and synthesis of rational drug regimens in a patient care clinical area.

**PHAR 7064 Pediatrics Rotation**

4 hrs.

Supervised clinical practice experience involving the analysis of pharmacotherapeutic and pharmacokinetic applications, evaluation of drug utilization, and synthesis of rational drug regimens in the context of pediatrics.

**PHAR 7090 Research Rotation**

4 hrs.

Supervised clinical research experience in areas such as the pharmacotherapeutic and pharmacokinetic applications, evaluation of drug utilization, or development of rational drug regimens under the direction of the student's Pharm.D. program advisor.

**PHAR 7094 Non-Patient Care Pharmacy Rotation**

4 hrs.

Elective pharmacy practice experience in a non-patient care setting for exploration of areas of professional interest.

**PHAR 7664 Patient Care Elective**

4 hrs.

Supervised pharmacy practice experiences in patient care settings for exploration of areas of professional interest and not meeting criteria for other rotation courses (i.e. community I, hospital I, ambulatory care I, adult medicine I, clinical pharmacy elective).

**W. TITLE IX**

The OUHS is committed to a policy of nondiscrimination in the education of students. This institution, in compliance with all applicable federal and state laws and regulations, does not discriminate on the basis of race, color, national origin, sex, age, religion, disability, or status as a veteran in any of its policies, practices or procedures. This includes but, is not limited to admissions, employment, financial aid, and educational services. The Office of Equal Opportunity for OUHS Campus may be contacted at (405) 271-2110. <https://studenthandbook.ouhsc.edu/hbSections.aspx?ID=338>.

**X. TECHNICAL STANDARDS AND STUDENT HANDBOOK**

Students must meet the fundamental technical standards of the OU Doctor of Pharmacy program upon admission and will be expected to demonstrate proficiency and continue to meet the required technical standards over the course of the program (See Appendix U). In addition to the policies outlined throughout this APPE Manual, students remain responsible for adherence to all student handbooks/policies, see <https://pharmacy.ouhsc.edu/current-students-residents/student-handbooks>.

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# APPENDIX A

## OU/SWOSU APPE Evaluation

### General Instructions:

- Review the evaluation form and determine which components are covered on your rotation.
- Rate the student’s performance according to the 2 scales described below.
- If an evaluation category was not covered, mark “n/a.” An individual rotation site is not expected to cover all the evaluation areas, only those pertinent to the practice setting and rotation.
- Note that certain items do not have “n/a” as an option, as students are expected to demonstrate knowledge, skills, or attitudes in these categories on every rotation.
- Space is provided at the end for you to add and evaluate unique competencies at your site.
- Written comments are:
  - **Required for any Entrustable Professional Activity (EPA) ratings of “observe only” and global assessment scores of “unacceptable performance” and “performs below expectations.”**
  - **Encouraged for all areas evaluated.**
- If you have any concerns about the student’s professional behavior or interpersonal skills, select “yes” at the end of the form and add supporting comments.
- Document any hours missed that were unrelated to college or professional activities in the area provided.
- At the midpoint and final evaluations, review the evaluation with the student and provide feedback about your assessments.

### SCORING FOR SECTION 1:

**Entrustable Professional Activities (EPAs)** describe the work of pharmacists as workplace tasks and responsibilities that all students are entrusted to do in the experiential setting with direct or distant supervision. APPE grading is based on your confidence in the student’s ability to perform the following EPA. As such, preceptors assess the level of supervision a student needs to perform or execute the activity or task using an entrustment decision scale. Preceptors should select an entrustment scale and assess learners prospectively to determine what learners can be trusted with on future activities during the experiential experience. Where applicable, the preceptor may consider entrustment level independent of intern law.

	<b>Observe Only</b>	<b>Direct Supervision</b>	<b>Reactive Supervision</b>	<b>Intermittent Supervision</b>
Level of Entrustment	Minimal	Low	Moderate	Moderately High
Preceptor may say	“Watch me do this task and then let’s talk about it”	“Let’s do this together. I’ll watch you do this task.”	“You go ahead and do this task, and I’ll double check <u>all</u> your findings” (Full review)	“You go ahead and do this task, and I’ll double check key findings” as allowable (Spot checking)

### SCORING FOR SECTION 2:

The Global Assessment Scale is used to evaluate professional knowledge, skills, and attitudes:

- **When performing midpoint and final evaluation, consider an average performance rating for students and begin assessing each item at this middle column.**
- If a student is performing lower than the description for "meets expectations," read the description for "performs below expectations," and if this description is not met, read the description for "unacceptable performance."
- If a student is performing above the description for a score of "meets expectations," read the description for "performs above expectations," and if this description is not the best fit, review the description of "exceptional performance."

- For each competency that you evaluate, **mark one rating** of unacceptable performance, performs below expectations, acceptable performance, performs above expectations, or exceptional performance which best describes the student's performance.

	<b>Unacceptable Performance</b>	<b>Performs Below Expectations</b>	<b>Acceptable Performance</b>	<b>Performs Above Expectations</b>	<b>Exceptional Performance</b>
Description	Student has rarely demonstrated the competency at an acceptable level and often does not complete tasks. Student requires continual guidance from preceptor	Student has not consistently demonstrated the competency at an acceptable level. Student required frequent guidance from preceptor	Student performed the competency at an acceptable level. Student has met expectations but requires occasional guidance from preceptor	Student performs above expectations and requires minimal guidance from preceptor	Student has excelled in performing competency

**If you are unable submit the evaluation online, make a copy of the completed evaluation for your files and send the original to the Director of Experiential Education:**

OU College of Pharmacy  
P.O. Box 26901, CPB 135B  
Oklahoma City, OK 73126-0901  
**Susan Conway, Pharm.D., FASHP, BCACP**  
Director of Experiential Education  
Phone 405-271-6484, ext. 47372  
Fax 405-271-3531  
Email: [susan-conway@ouhsc.edu](mailto:susan-conway@ouhsc.edu)

**OU/SWOSU APPE Evaluation Form**

<b>Student:</b>	<b>Rotation Site:</b>
<b>Preceptor:</b>	<b>Date (Month &amp; Year):</b>

**SECTION 1: Entrustable Professional Activities**

		Observe Only (Minimal Entrustment)	Direct Supervision (Low Entrustment)	Reactive Supervision (Moderate Entrustment)	Intermittent Supervision (Moderately High Entrustment)	N/A	Comments
<b><u>Collect:</u></b>  Collect information necessary to identify a patient’s medication-related problems and health-related needs.	<b>Midpoint</b>						
	<b>Final</b>						
<b><u>Assess:</u></b>  Assess collected information to determine a patient’s medication-related problems and health-related needs.	<b>Midpoint</b>						
	<b>Final</b>						
<b><u>Plan:</u></b>  Create a care plan in collaboration with the patient, others trusted by the patient, and other health professionals to optimize pharmacologic and nonpharmacologic treatment.	<b>Midpoint</b>						
	<b>Final</b>						
<b><u>Team Interactions:</u></b>  Contribute patient-specific medication-related expertise as part of an interprofessional team.	<b>Midpoint</b>						
	<b>Final</b>						
<b><u>Drug Information Provider:</u></b>  Answer medication-related questions using scientific resources, including primary literature.	<b>Midpoint</b>						
	<b>Final</b>						
<b><u>Implement:</u></b>  Implement a care plan in collaboration with the patient, others trusted by the patient, and other health professionals.	<b>Midpoint</b>						
	<b>Final</b>						

		Observe Only (Minimal Entrustment)	Direct Supervision (Low Entrustment)	Reactive Supervision (Moderate Entrustment)	Intermittent Supervision (Moderately High Entrustment)	N/A	Comments
<b><u>Distribution:</u></b>  Fulfill a medication order.	Midpoint						
	Final						
<b><u>Patient Education:</u></b>  Educate the patient and others trusted by the patient regarding the appropriate use of a medication, device to administer a medication, or self-monitoring strategies.	Midpoint						
	Final						
<b><u>Monitor:</u></b>  Monitor and evaluate the safety and effectiveness of a care plan.	Midpoint						
	Final						
<b><u>Safety:</u></b>  Report adverse drug events and/or medication errors in accordance with site-specific procedures.	Midpoint						
	Final						
<b><u>Provider/Public Education:</u></b>  Deliver medication or health-related education to health professionals or the public.	Midpoint						
	Final						
<b><u>Risk Management:</u></b>  Identify populations at risk for prevalent diseases and preventable adverse medication outcomes.	Midpoint						
	Final						
<b><u>Operations:</u></b>  Perform the technical, administrative, and supporting operations of a pharmacy practice site.	Midpoint						
	Final						

**SECTION 2: Educational Outcomes**

		Unacceptable performance	Performs Below Expectations	Acceptable performance	Performs Above Expectations	Exceptional performance	Comments
<p><b>Medication, Disease state, and Pharmacy Practice Knowledge:</b></p> <ul style="list-style-type: none"> <li>Explains Medications, diseases, &amp; pharmacy practice or related content in detail &amp; depth</li> </ul> <p><b>Communication:</b></p> <ul style="list-style-type: none"> <li>Actively listens by focusing attention and asking questions for clarification</li> <li>Gathers information through appropriate use of open and closed-ended questions</li> <li>Uses effective interpersonal skills to establish rapport and trust</li> <li>Demonstrates empathy in interactions with others</li> <li>Is clear &amp; organized with speech</li> <li>Information is complete, concise &amp; well organized. Appropriate use of medical terminology; no grammatical or spelling errors</li> </ul>	Midpoint						
	Final						
	Midpoint						
	Final						
<p><b>Self-Awareness:</b></p> <ul style="list-style-type: none"> <li>Demonstrates motivation &amp; engagement</li> <li>Solicits feedback &amp; modifies behavior to improve performance</li> <li>Uses the Continuous Professional Development cycle for growth &amp; development (reflect, plan, learn, evaluate, apply)</li> </ul> <p><b>Professionalism:</b></p> <ul style="list-style-type: none"> <li>Asks questions freely, finds answers on their own, and assignments are promptly completed</li> <li>Manages time effectively &amp; sets priorities</li> <li>Arrives on time &amp; does not leave until responsibilities are met</li> <li>Utilizes of the Oath of the Pharmacist in professional interactions</li> <li>Embodies a commitment to building and maintaining trusted professional relationships</li> </ul>	Midpoint						
	Final						
	Midpoint						
	Final						

		Unacceptable performance	Performs Below Expectations	Acceptable performance	Performs Above Expectations	Exceptional performance	N/A	Comments
<b><u>Problem Solving Process:</u></b> <ul style="list-style-type: none"> <li>Generates, prioritizes, and defends solutions to problems</li> <li>Explores approaches to improve outcomes or overcome barriers within practice and/or profession</li> </ul>	Midpoint							
	Final							
<b><u>Pharmacy Calculations:</u></b> <ul style="list-style-type: none"> <li>Performs calculations pertinent to drug preparation, administration, and monitoring, and/or drug literature evaluation</li> </ul>	Midpoint							
	Final							
<b><u>Population Health and Wellness Promoter:</u></b> <ul style="list-style-type: none"> <li>Identifies opportunities for population health promotion</li> <li>Identifies strategies to address population health and wellness at the site</li> </ul>	Midpoint							
	Final							
<b><u>Cultural and Structural Humility:</u></b> <ul style="list-style-type: none"> <li>Recognizes health literacy &amp;/or cultural and structural factors negatively impacting health access</li> <li>Mitigates health disparities and respects patients' social determinants of health, religious, cultural, &amp; moral concerns &amp;/or value systems</li> </ul>	Midpoint							
	Final							
<b><u>Medication Use Process Stewardship:</u></b> <ul style="list-style-type: none"> <li>Comprehends the pharmacy or institutions formulary policy</li> <li>Participates in the pharmacy or institutions reporting of medication errors, ADR's &amp; DUE's</li> <li>Applies principles of outcomes research, pharmacoconomics, &amp; quality assessment to provision or evaluation of patient outcomes</li> </ul>	Midpoint							
	Final							
<b><u>Leadership:</u></b> <ul style="list-style-type: none"> <li>Interacts to build relationships, value contributions &amp; communicate to promote teamwork</li> </ul>	Midpoint							
	Final							
<b><u>Advocacy:</u></b> <ul style="list-style-type: none"> <li>Shows regard for the well-being of the patient</li> <li>Promotes the best interests of patients and/or the pharmacy practice within health care systems and at the community, state, or national level</li> </ul>	Midpoint							
	Final							

**ADDITIONAL COMPETENCIES (If there are unique competencies that are not covered above, it is optional to write in your own rotation-specific competencies.) - Global Assessment Scale**

Please select "N/A" if not adding any unique competencies.

		Unacceptable performance	Performs Below Expectations	Acceptable performance	Performs Above Expectations	Exceptional performance	N/A	Comments
<b>Competency 1 (write in below):</b>	Midpoint							
	Final							
<b>Competency 2 (write in below):</b>	Midpoint							
	Final							
<b>Competency 3 (write in below):</b>	Midpoint							
	Final							

	Yes	No	Comments
I verify that I am a licensed preceptor signing for State Board intern hours			
All hours missed during a rotation are expected to be made up. For the purposes of the State Board intern hours, did the student miss any time unrelated to College or professional activities and not make up the time by the conclusion of the rotation?			
Do you have any concerns about the student's professional behavior or interpersonal skills			

Midpoint Evaluation    Date: \_\_\_\_\_                      Preceptor signature: \_\_\_\_\_                      Student signature: \_\_\_\_\_

Final Evaluation Date: \_\_\_\_\_                      Preceptor signature: \_\_\_\_\_                      Student signature: \_\_\_\_\_

**REFERENCES FOR ADDITIONAL INFORMATION**

This evaluation form is based on the:

- 2022 AACP Curricular Outcomes and Entrustable Professional Activities
  - [https://www.aacp.org/sites/default/files/2024-04/CurriculumOutcomesEntrustableActivities2022\\_0.pdf](https://www.aacp.org/sites/default/files/2024-04/CurriculumOutcomesEntrustableActivities2022_0.pdf)
  - <https://www.aacp.org/sites/default/files/2017-10/Appendix1CoreEntrustableProfessionalActivities%20%281%29.pdf>
- ACPE 2025 Standards
  - <https://www.acpe-accredit.org/pdf/ACPEStandards2025.pdf>

## APPENDIX B

### DOCTOR OF PHARMACY PROGRAM APPE GRADING FORM

Student Name \_\_\_\_\_

Preceptor's Name \_\_\_\_\_

Preceptor's Signature \_\_\_\_\_

Rotation \_\_\_\_\_

Time Period for the Rotation \_\_\_\_\_

#### Rotation Grading:\*

Rotation experience grade \_\_\_\_\_/100 X 70% = \_\_\_\_\_

Oral and/or written exam grade \_\_\_\_\_/100 X 30% = \_\_\_\_\_

Total Points for the Rotation \_\_\_\_\_

Final Rotation Grade (S/U) \_\_\_\_\_

**\* Remember that a student must achieve at least 70% in all rotation areas that are graded**

## APPENDIX C

### UNIVERSITY OF OKLAHOMA COLLEGE OF PHARMACY APPE LOG

Student Name: \_\_\_\_\_ Intern No: \_\_\_\_\_

The log below serves to verify the primary preceptor and intern hours accumulated during the nine 1-month APPE rotations. It must be signed by the student following the final rotation month and submitted to the Director of Experiential Education. The primary preceptor who will be evaluating student performance should verify hours submitted and sign/date the log at the end of the rotation. Unless otherwise instructed, students will begin a rotation period on the first working day of the month and end on the last working day of the month. Therefore, each rotation period will be one calendar month and a minimum of 160 contact hours.

Rotation	Practice Site	Primary Preceptor Printed Name	Primary Preceptor Signature & Pharmacist License #	Date
June				
July				
August				
September				
October				
November				
December				
January				
February				
March				
April				
May				

My signature below attests that the rotation hours submitted above are an accurate and truthful representation of my training.

Student signature: \_\_\_\_\_ Date: \_\_\_\_\_

## APPENDIX D

### EXAMPLE OF CASE PRESENTATION EVALUATION FORM

Student Name \_\_\_\_\_

Date \_\_\_\_\_

Topic \_\_\_\_\_

Grade \_\_\_\_\_

Evaluator \_\_\_\_\_

Rate the student's performance of the following:  
(Assign a grade on a scale of 0 to 10 for each element).

#### GENERAL RATING

- \_\_\_\_\_ 1. The student appeared to be interested in the topic and spoke in a way that could be understood.
- \_\_\_\_\_ 2. The student presented material in a confident manner (good eye contact with audience, able to speak independent of notes).
- \_\_\_\_\_ 3. The student explained information clearly.
- \_\_\_\_\_ 4. The student stimulated discussion.
- \_\_\_\_\_ 5. The student gave a presentation that was well-organized and easy to follow.
- \_\_\_\_\_ 6. The student used allotted time wisely with appropriate emphasis on discussion and evaluation of therapy.

#### CONTENT

- \_\_\_\_\_ 1. The student recognized and presented the pertinent information.
- \_\_\_\_\_ 2. The student presented the case clearly and concisely.
- \_\_\_\_\_ 3. The student demonstrated a thorough knowledge of the case.
- \_\_\_\_\_ 4. The student prepared a complete and appropriate problem list.
- \_\_\_\_\_ 5. The student was able to list monitoring parameters and therapeutic end points for drug therapy.
- \_\_\_\_\_ 6. The student took a critical approach in evaluating therapy (e.g. appropriateness of drug selection and effectiveness vs. adverse effects).
- \_\_\_\_\_ 7. The student discussed alternative therapy and compared it to current therapy.
- \_\_\_\_\_ 8. The student was able to reach independent conclusions about the patient's therapy.
- \_\_\_\_\_ 9. The student demonstrated a thorough understanding of the subject.
- \_\_\_\_\_ 10. The student gave concise and complete answers to questions.
- \_\_\_\_\_ 11. The student used current references and applied them appropriately in the discussion.

# APPENDIX E

## EXAMPLE OF CASE SUMMARY FORM

STUDENT:

INSTRUCTOR:

DATE:

---

### A. Demographic Data:

Hospital #: \_\_\_\_\_ Birthdate: \_\_\_\_\_ Age: \_\_\_\_ Sex: \_\_\_\_ Race: \_\_\_\_\_

Height: \_\_\_\_ Weight: \_\_\_\_ Ideal Weight: \_\_\_\_ Marital Status: \_\_\_\_ Children: \_\_\_\_\_

Occupation: \_\_\_\_\_ Admission Date: \_\_\_\_\_ Discharge Date: \_\_\_\_\_

---

### B. Medical Summary (on admission or visit):

Briefly outline CC, HPI, PMH, social hx, family hx, drug hx, allergies; and PERTINENT ROS, PE, and labs.

### C. Problem List:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

### D. Drug Therapy Monitoring:

For each problem, list the drug therapy used and list the appropriate monitoring parameters and therapeutic endpoints.

### E. Drug Therapy Evaluation:

For each problem, criticize the drug therapy that was used (compare any advantages and disadvantages to alternative therapies). Include dosing criticisms.

### F. Pharmacokinetic Evaluation:

Calculate individualized drug dosing regimens where appropriate (e.g., for digoxin, theophylline, or aminoglycosides).

### G. Summary of Hospital Course (BRIEF):

### H. Patient Counseling:

Describe pertinent counseling information for discharge drugs (or proposed discharge drugs if patient still in hospital).



# APPENDIX F

## EXAMPLE OF DRUG INFORMATION RESPONSE EVALUATION FORM

Student Name \_\_\_\_\_ Topic \_\_\_\_\_

Date \_\_\_\_\_

Grade \_\_\_\_\_ Evaluator \_\_\_\_\_

### General

#### Delivery

General (6) \_\_\_\_\_

Clarity of thought (4) \_\_\_\_\_

Ability to present topic independent of notes (3) \_\_\_\_\_

Grammar and neatness (4) \_\_\_\_\_

Organization (7) \_\_\_\_\_

### Current literature use beyond

Texts (6) \_\_\_\_\_

Recognition of pertinent material (Ability to extract important material) (6) \_\_\_\_\_

Conciseness (6) \_\_\_\_\_

Understanding of subject (7) \_\_\_\_\_

Critical approach to subject (7) \_\_\_\_\_

Ability to reach independent conclusions (7) \_\_\_\_\_

Thoroughness of answers to instructor's questions (7) \_\_\_\_\_

Note: Points for each criterion indicated in parentheses.

### Quality of Response

Question addressed directly (Relevance of answer) (10) \_\_\_\_\_

Completeness of answer (10) \_\_\_\_\_

Accuracy of response (10) \_\_\_\_\_



## APPENDIX H

### EXAMPLE OF MEDICATION HISTORY/COMPLETE MEDICATION REVIEW

#### GOALS

#### **A. Obtain a complete survey of drugs patient is taking and indications for therapy.**

1. The chart should be reviewed to obtain information regarding disease states (signs and symptoms) of the patient and medications the patient is taking. Direct questions can then be formulated to serve as reminders to the patient so (s)he can relate more accurately what medication(s) (s)he is taking, for how long, and the reason for therapy.
2. If the patient is unable to relate what medications (s)he is taking, a relative (wife or husband, etc.) should be interviewed.
3. If the patient brought medications to the hospital or clinic, the labels should be examined and an attempt made to identify the drugs.
4. If the patient or relative does not help in the identification of the patient's medications and the patient did not bring the medications to the hospital, the patient's pharmacy should be contacted.
5. If the pharmacy cannot give the above, then the office of the physician who prescribed the medication should be called.

NOTE: Only when these five steps have been completed can a pharmacist honestly say to the physician, "I do not know what the patient is taking."

#### **B. Assess patient compliance. (If patient is noncompliant, determine reasons.)**

1. Direct questions must be formulated that will answer the following:
  - a. How does the prescription label indicate the medications are supposed to be taken?
  - b. What time of the day (e.g. 8 A.M., 2 P.M. etc.) are the medications actually taken?
  - c. How much is taken? (number of tabs)
  - d. How frequently are the medications taken? (e.g. 2 tabs/day, every other day, per week or per year.)
  - e. How are medications administered?
  - f. Are any doses ever missed or extra doses taken?
2. The presence of any of the following reasons for poor compliance should be determined.
  - a. Patient is feeling better.
  - b. Patient thinks the drug does not help.
  - c. Patient thinks that an extra dose is needed for better and/or faster effect.
  - d. Patient forgets to take the medication with him/her while away from home.
  - e. Patient thinks the medication makes him/her feel worse.
  - f. Patient thinks the prescriber did not take enough time with him/her and thus deliberately does not take the medicine.
  - g. Patient misunderstands the label instructions.
  - h. Patient mixes medications.
  - i. Patient is not aware of the reasons for continuing medication beyond the point of feeling better.

#### **C. Identify allergic and adverse reactions and clinically significant drug-interactions.**

1. Knowledge of the signs (objective data) and symptoms (subjective data) of the patient's disease state(s) must be obtained since it is essential in making an intelligent assessment of whether the patient is experiencing adverse effects from medications.
2. Knowledge of the effects and side effects of the patient's medications, and drug laboratory values affected must be obtained since it is essential in formulating direct questions to the patient to obtain information as to whether (s)he is experiencing such adverse drug reactions.

#### **D. Determine effectiveness of medications.**

1. Knowledge of the signs and symptoms of the patient's disease state(s) as well as the therapeutic end points of drug therapy must be obtained since it is essential in order to assess the effectiveness of drug

therapy. From this knowledge, direct questions can be formulated to assess the subjective-objective improvement of the patient's disease state(s).

In writing your assessment and plan of action at the end of your drug history after collecting your subjective and objective data, state your findings, then your opinions. If you find nothing (e.g. no adverse effects) you must report you found nothing so others will know you investigated that aspect of the patient's therapy. Negative findings must be reported.

## PROCEDURE

- A. Review chart prior to seeing the patient to determine the patient's disease states and drug therapy.
  - B. Assume proper attitude: be cheerful, pleasant and nonjudgmental.  
Patient must feel complete acceptance by interviewer. At all times maintain an active, alert interest in what the patient is saying and doing.
  - C. Call the patient's name and take him/her into a room. Close the door for privacy. Never interview a patient in a waiting room or hallway. If the person to be interviewed is an inpatient and is sleeping or has visitors, return later.
  - D. Introduce yourself to the patient, explain who you are, what you are doing, and why.  
e.g., "Hello Mrs. Sweeny. My name is Joe Smith. I am a 'Pharmacy Intern' working with the medical staff in the Medicine Clinics. May I ask you a series of routine questions about your medications?"  
e.g., "Hello, Mrs. Sweeny. Have you seen a pharmacist today? My name is Joe Smith. I am a pharmacy intern and would like to ask you a series of routine questions about your medications."
  - E. First questions to ask:
    1. The name(s) and address(es) of the pharmacy where the patient has their prescriptions filled. Does patient know pharmacist by name?
    2. The name(s) and address(es) of other physicians the patient may be seeing.
    3. What medications the patient has brought with him/her.
  - F. Begin the interview with an open question.  
e.g., "What medications are you taking?"
  - G. Let the patient initially lead the interview. When the patient has completed their sage begin filling in missing information in your drug history by using closed questions (direct questions). Begin all new topics with an open question.  
e.g., "Have your medications been agreeing with you?"  
"How have your medications been working?"  
"How do you take your medications?"
  - H. Ask one question at a time. Keep it simple to avoid confusion. Use terminology the patient will understand.
  - I. LISTEN.
  - J. Use silence to stimulate and encourage information from the patient.
  - K. Confrontation with empathy can be used to elicit cooperation.  
Letting the patient know you understand his feelings is important.  
e.g., "I get the feeling that you do not think your medications are important."
  - L. Read nonverbal communication while with the patient.  
Observe the patient's appearance, smell, posture, face, and eyes.  
What are your senses telling you about the patient?  
Seventy percent of communication is nonverbal.
  - M. Do not allow the patient to veer from the drug history - lead him/her back to the topic being discussed.  
e.g., "You were saying....."
  - N. To clarify information related, summarize information received back to the patient.
  - O. Interpret for the patient any side effects or misconceptions about the drug therapy (s)he may have.
  - P. Conclude the interview with:  
e.g., "Mrs. Sweeney, I have been asking all the questions, do you have any you would like to ask me concerning your medications?"
  - Q. Use caution when answering a patient's questions about their medical condition(s). When in doubt, refer such questions to your preceptor and/or the treating physician(s).
  - R. Finally, thank the patient for their time and cooperation.
- For more specific questions, see the Medication History Form.

EXAMPLE OF MEDICATION HISTORY FORM

Patient Name \_\_\_\_\_ Patient No. \_\_\_\_\_ Date \_\_\_\_\_  
Birthdate \_\_\_\_\_ Sex \_\_\_\_\_ Race \_\_\_\_\_ Ht. \_\_\_\_\_ Wt. \_\_\_\_\_

**Problem List:**

**Allergic or Adverse Reactions:** (Include drug (or food, animals, etc.) and route of administration, nature of reaction, required treatment, and date.)

**Current Prescription Medications:** (Include drug, dose, (and any dosage changes), and route; duration of therapy; reason for therapy; and any side effects)

**Past Prescription Medications:** (Include drug, dose, and route; time and duration of therapy; reasons for starting and stopping therapy; and any side effects)

Does patient ever give medications to someone else or take anyone else's medication?

**Diet:**

**Smoking History:**

**Alcohol Consumption:**

**Consumption of Coffee, Tea, Soft Drinks: (Caffeine-Containing)**

**Over the Counter Drugs:**

Category	If taken, list product, dose, and frequency of usage
1. Analgesics	_____
2. Eye Preps	_____
3. Sleeping Aids	_____
4. Stimulants	_____
5. Cough Preps	_____
6. Cold Preps	_____
7. Breathing Meds	_____
8. Antacids/antisecretory	_____
9. Laxatives	_____
10. Antidiarrheals	_____
11. Hemorrhoidal Preps	_____
12. Vitamins	_____
13. Herbal products	_____
14. Topical Preps	_____

**Subjective Evaluation of Therapy:**

**Objective Data**

1. Date	Drug	Dose	Sample Time	Time of Last Dose	Level
---------	------	------	-------------	----------------------	-------

2. Pertinent Lab Tests:

3. Other:

**Assessment:**

1. Current Regimen:

2. New or Drug Related Problems (Adverse reactions, interactions, etc.):

3. Patient Adherence:

**Plan/Recommendations:**

1. Medications:

2. Patient Education:

3. Lab Tests:

4. Return Appointment: (if outpatient)

Physician(s):

Patient's Local Pharmacy(ies):

Student/Pharmacist:

# APPENDIX I

## EXAMPLE OF ORAL HEALTH CARE PROVIDER RECOMMENDATION RUBRIC

<b>CONTENT</b>					
	<u>3 points</u>	<u>2 points</u>	<u>1 point</u>	<u>0 point</u>	<u>Points</u>
Assessment	Assessment was verbalized. Included <b>ALL</b> of the following: 1) description of the condition, such as "uncontrolled", "not at goal", "appropriate therapy" etc. 2) based upon appropriate subjective and objective information. 3) based upon appropriate studies or practice guidelines.	Assessment was verbalized. Included <b>TWO</b> of the following: 1) description of the condition, such as "uncontrolled", "not at goal", "appropriate therapy" etc. 2) based upon appropriate subjective and objective information. 3) based upon appropriate studies or practice guidelines.	Assessment was verbalized. Included <b>ONE</b> of the following: 1) description of the condition, such as "uncontrolled", "not at goal", "appropriate therapy" etc. 2) based upon appropriate subjective and objective information. 3) based upon appropriate studies or practice guidelines.	Assessment was <b>NOT verbalized OR</b> verbal assessment did <b>NOT include any</b> of the following: 1) description of the condition, such as "uncontrolled", "appropriate therapy", "not at goal", etc. 2) based upon appropriate subjective and objective information. 3) based upon appropriate studies or practice guidelines.	
Plan	Plan was verbalized. Included <b>ALL</b> of the following: 1) reflective of the assessment. 2) Includes specific medication/lifestyle recommendations. 3) Includes dosing, scheduling, and counseling points.	Plan was verbalized. Included <b>TWO</b> of the following: 1) reflective of the assessment. 2) Includes specific medication/lifestyle recommendations. 3) Includes dosing, scheduling, and counseling points.	Plan was verbalized. Included <b>ONE</b> of the following: 1) reflective of the assessment. 2) Includes specific medication/lifestyle recommendations. 3) Includes dosing, scheduling, and counseling points.	Plan was <b>NOT verbalized OR</b> plan did <b>NOT include any</b> of the following: 1) reflective of the assessment. 2) Includes specific medication/lifestyle recommendations. 3) Includes dosing, scheduling, and counseling points.	
<b>COMMUNICATION</b>					
	<u>2 points</u>	<u>1 point</u>	<u>0 points</u>		<u>Points</u>
Opening	Introduces self <b>AND</b> gives a brief reason for interaction	Introduces self <b>OR</b> gives a brief reason for interaction, but not both	Doesn't provide an opening at all. Goes straight into addressing the problem.		
Non-Verbal	Good eye contact/little reliance on notes <b>AND</b> no signs of nervousness.	Moderate reliance on notes which limits eye contact <b>OR</b> some signs of nervousness.	Heavy reliance on notes with little eye contact <b>OR</b> obvious signs of nervousness, impairing delivery of information.		
Organization	Structured in approach, easy to follow, and no jumping around.	some jumping around, moderate difficulty in following thought process	disorganized presentation and difficult to follow thought process.		
Closing	Provides concise summary and next steps; makes self available in the future.	Provides some sort of closing, but doesn't include all the necessary components.	Doesn't provide a closing at all. Interaction abruptly ends.		

## APPENDIX J

### EXAMPLE PHARMACIST PATIENT CARE PROCESS CASE RUBRIC

	Unacceptable (0 points)	Needs significant development (1 point)	Needs development (2 points)	Refined (3 points)
<b>Collect (points x 2)</b>				
Complete, concise, and accurate summary of S/O, including CC, HPI, PMH, and medications	<p>Elements pertinent to the primary problem are missing entirely</p> <p>Grossly incomplete and/or inaccurate information for the primary problem Information other than S/O provided</p>	<p>Substantial improvements needed or irrelevant information provided</p> <p>Some inaccurate information provided Information other than S/O provided</p>	<p>Minor improvements needed for summary of pertinent information</p> <p>Mostly accurate summary of pertinent information Only S/O information given</p>	<p>Complete and concise summary of pertinent information for primary problem</p> <p>All information is accurate with no incorrect information Only S/O information given</p>
<b>Assess (points x 2)</b>				
<p>Problem Identification</p> <p>Current therapy Evidence/Best Practices</p> <p>Recommended interventions</p>	<p>Less than 50% of problems are listed &lt;OR&gt; main problem missed &lt;OR&gt; identified nonexistent problems</p> <p>Reference inappropriate or missing</p> <p>Incomplete or inaccurate assessment of intervention lacking a rational interpretation and/or integration of available information</p>	<p>Some problems are identified (50%-80%) &lt;OR&gt; includes nonexistent problems or extraneous information</p> <p>Substantial improvements needed for selection of references</p> <p>Substantial improvements needed for the assessment of current therapy, rational interpretation, and integration of available information</p>	<p>Most problems are identified including the "main" problem for the case (&gt;80%)</p> <p>References mostly appropriate guidelines and/or clinical trials for best practices</p> <p>Assessment of intervention needed mostly based on rational interpretation and integration of available information</p>	<p>Complete problem list generated; no extraneous information or issues listed</p> <p>References appropriate guidelines for best practices and/or clinical trials for the primary problem</p> <p>Assessment of intervention needed based on rational interpretation and integration of available information for the primary problem</p>
<b>Plan (points x 2)</b>				
<p>Treatment Goals</p> <p>Specific Plan</p>	<p>Inappropriate and irrelevant therapeutic goals</p> <p>Specific, appropriate and justified recommendations (including drug name, strength, route, frequency, and duration of therapy) missing entirely</p>	<p>Substantial improvements needed in establishing appropriate and relevant therapeutic goals</p> <p>Substantial improvements needed in establishing specific, appropriate and justified recommendations (drug name, strength, route, frequency, and/or duration of therapy are missing)</p>	<p>Mostly appropriate and therapeutic goals established</p> <p>Minor improvements needed in establishing specific, appropriate and justified recommendations (including drug name, strength, route, frequency, and duration of therapy)</p>	<p>Appropriate and relevant therapeutic goals for the primary problem</p> <p>Specific, appropriate and justified recommendations (including drug name, strength, route, frequency, and duration of therapy) for the primary problem</p>
<b>Implement</b>				
Patient Education	Inappropriate and irrelevant patient education	Substantial improvements needed for patient education elements	Mostly appropriate and relevant patient education provided	Appropriate and relevant patient education for the primary problem
<b>Follow-up</b>				
Monitoring	Monitoring parameters and frequency not mentioned	Substantial improvement needed for monitoring parameters and frequency	Mostly appropriate monitoring parameters described including frequency	Specific monitoring parameters and frequency described for the primary problem
<b>Overall</b>				

<p><b>Oral Presentation Skills</b></p>	<p>Good voice projection not appropriate for professional presentation</p> <p>Appropriate eye contact not appropriate for professional presentation</p>	<p>Good voice projection needs marked improvement</p> <p>Appropriate eye contact needs marked improvement</p>	<p>Good voice projection could be improved</p> <p>Appropriate eye contact could be improved</p>	<p>Good voice projection</p> <p>Appropriate eye contact</p>
<p><b>Problem prioritization Succinct and organized</b></p>	<p>No appropriately prioritized</p> <p>Presentation involves excessive amounts of extraneous information</p> <p>Information disorganized</p>	<p>Some problems appropriately prioritized</p> <p>Substantial improvement needed with respect to extraneous information presented</p>	<p>Most problems appropriately prioritized</p> <p>Minor improvement needed with respect to extraneous information presented</p>	<p>All problems appropriately prioritized</p> <p>Succinct (no extraneous information)</p> <p>Information well-organized</p>

Score: \_\_\_\_/30

## APPENDIX K

### EXAMPLE OF WRITTEN HEALTH CARE PROVIDER RECOMMENDATION RUBRIC

	<b>2 points</b>	<b>1 points</b>	<b>0 points</b>	
<b>Opening</b>	Identifies self <b>AND</b> the patient, including name and/or identifier <b>AND</b> patient age	Does not Identify self <b>OR</b> does not identify the patient, by any identifier <b>OR</b> patient age	Does not identify self <b>AND</b> does not identify the patient at all.	
<b>Situation</b>	Clearly and briefly stated the major medication problem to be addressed.	Stated the major medication problem, however, was somewhat unclear <b>OR</b> lacked some information <b>OR</b> was overly detailed.	Medication problem was not stated at all <b>OR</b> was stated but was grossly over- or under-described.	
<b>Background</b>	Provides <b>ALL</b> of the following: pertinent labs, medications, allergies, vitals, and any additional clinical information necessary.	Missing <b>ONE</b> of the following: pertinent labs, medications, allergies, or vitals.	Missing <b>&gt;1</b> of the following: pertinent labs, medications, allergies, or vitals.	
<b>Assessment</b>	Included <b>ALL</b> of the following: 1) description of the condition, such as "uncontrolled", "not at goal", "appropriate therapy" etc. 2) based upon appropriate subjective and objective information. 3) based upon appropriate landmark studies or practice guidelines.	Included <b>TWO</b> of the following: 1) description of the condition, such as "uncontrolled", "not at goal", "appropriate therapy" etc. 2) based upon appropriate subjective and objective information. 3) based upon appropriate landmark studies or practice guidelines.	Included <b>&lt;2</b> of the following: 1) description of the condition, such as "uncontrolled", "not at goal", "appropriate therapy" etc. 2) based upon appropriate subjective and objective information. 3) based upon appropriate landmark studies or practice guidelines.	
<b>Plan</b>	Included <b>ALL</b> of the following: 1) reflective of the assessment. 2) Includes specific medication/lifestyle recommendations. 3) Includes dosing, frequency, duration and counseling points. 4) monitoring parameters for recommendation (when applicable)	Included <b>TWO</b> of the following: 1) reflective of the assessment. 2) Includes specific medication/lifestyle recommendations. 3) Includes dosing, scheduling, and counseling points. 4) monitoring parameters for recommendation (when applicable)	Included <b>&lt;2</b> of the following: 1) reflective of the assessment. 2) Includes specific medication/lifestyle recommendations. 3) Includes dosing, scheduling, and counseling points. 4) monitoring parameters for recommendation (when applicable)	
<b>Communication</b>	Uses professional language, structured in approach, easy to follow, and no jumping around.	Moderate use of professional language, some jumping around, moderate difficulty in following thought process	Use of unprofessional language, disorganized recommendation and difficult to follow thought process.	

## APPENDIX L: FIELD ENCOUNTERS SUMMARY TABLE

### Case Logging, E-Portfolio, & Self-Assessment Requirements by Type (with Quantity Required)

APPE Type	CASE LOGS								E-PORTFOLIOS					SELF-ASSESSMENT		TOTAL FIELD ENC. PER APPE
	<sup>1</sup> PPCP	<sup>2</sup> PK	<sup>3</sup> CMPD	<sup>4</sup> HCPED	<sup>5</sup> IMM	<sup>6</sup> IP	<sup>7</sup> PTED	<sup>8</sup> PS/QI	<sup>9</sup> PPCP/ SOAP note	<sup>10</sup> Journal Club	<sup>11</sup> Check-list	<sup>12</sup> Project topic & final	Journal	<sup>13</sup> Pre-APPE	<sup>14</sup> Bi-annual	
Adult med/ Critical care	5	2	---	1	---	2	---	2	1	1	---	---	---	1	1 – fall 1 - spring	15
Am Care	5	---	---	1	---	2	3	1	1	1	---	---	---	1		15
Community	3	---	2	1	4	2	5	1	---	---	1	---	---	1		20
Hospital	5	---	3	1	---	2	---	2	---	---	1	---	---	1		15
Clinical	5	0-2	---	1	---	2	0-5	1	1	0-1	---	0-1	---	1		15
Elective-Pt Care	5	0-2	0-5	0-1	0-4	2	0-5	1	0-1	0-1	0-1	1	---	1		15
Elective-Non-Pt Care	---	---	---	---	---	---	---	1	---	---	---	0-1	---	1		2-3
BOP meeting	---	---	---	---	---	---	---	---	---	---	---	---	1	---		1
<b>Minimum per category</b>	<b>33</b>	<b>2</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>14</b>	<b>8</b>	<b>11</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>9</b>	<b>2</b>	
<b>Maximum per category</b>	<b>43</b>	<b>6</b>	<b>15</b>	<b>9</b>	<b>10</b>	<b>18</b>	<b>25</b>	<b>11</b>	<b>7</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>1</b>	<b>9</b>	<b>2</b>	

<sup>1</sup> **Pharmacist Patient Care Process (PPCP)** – brief summary in notes, including addition of associated disease state(s) as patient assessments and applicable interventions; entries should demonstrate diversity of patient characteristics (conditions, age, gender, ethnicity). See Appendix N.

<sup>2</sup> **PK (Pharmacokinetics)** – PK calculations can include monitored medications or adjustment for renal function or drug interactions; renal function adjustment can be documented under the category of other PK: Other.

<sup>3</sup> **CMPD (Compounding)** – should include both sterile and nonsterile compounding

<sup>4</sup> **HCPED (Healthcare Professional Education)** – may include formal or informal oral presentations, DI responses, and/or brief in-services to pharmacists and/or other healthcare providers); a PDF or Word document of the PowerPoint slides and written DI responses should be uploaded to accompany the case log.

<sup>5</sup> **IMM (Immunizations and therapeutic injections)** – injections administered reflecting a variety of immunizations/medications and patient ages

<sup>6</sup> **IP (Interprofessional collaboration or communication)** – document interactions with communication (written or verbal, formal or informal) with a healthcare provider outside of discipline of pharmacy

<sup>7</sup> **PTED (Patient Education)** – both prescription and non-Rx (OTC) counseling sessions should be documented, including for a variety of the disease state(s) and medication(s)

<sup>8</sup> **PS/QI (Patient safety/quality improvement)** – documentation of drug reaction identification/resolution, prevention/management of a medication error, or other quality improvement project

<sup>9</sup> **PPCP or SOAP Note** – de-identified SOAP or PPCP notes as documented in electronic health record or presented to preceptor for care presentation

<sup>10</sup> **Journal Club** – journal club presentation summaries should be uploaded in either PDF or word format. If journal club was not assigned by the preceptor, a half-page summary of a recent journal article related to the APPE scope of practice can be uploaded

<sup>11</sup> **Checklist** – A checklist is required for all community I, II, and III and hospital I and II APPEs. The checklist form should be printed from the CORE ELMS library and worked on with the preceptor through the rotation and then upload once complete.

<sup>12</sup> **Project** – 1 project is required for all clinical, patient care, and non-direct patient care electives with adjunct faculty preceptors and serves as objective grading component for these rotations. Faculty may require projects of students, but approval is not required through the experiential office.

<sup>13</sup> **Pre-APPE self-evaluation** – a pre-rotation self-evaluation/reflection should be done within 1 week prior to the first day of each rotation

<sup>14</sup> **Bi-annual self-evaluation** – a global self-evaluation should be completed in the fall semester by October 1<sup>st</sup> and in the spring semester by February 1<sup>st</sup> of the P4 year

#### **Additional guidance:**

- If a second rotation is completed in any rotation type, the field encounter requirements are the same with the exception that a project is required instead of an exam for a second month in adult medicine/critical care, am care, community, or hospital. The project is only a requirement of rotations with adjunct preceptors

- If a rotation does not provide an experience to meet a specific field encounter requirement, then the student should complete the requirement on another APPE to meet the minimum total for that column.

- If more than 1 option needs to be selected from a drop down, highlight all the options you want to select by using the Ctrl key.

- Though patient activities are required for the field encounters, students must safeguard privacy and not include confidential protected health information (PHI)

## APPENDIX M

### GUIDELINES FOR ROTATION PROJECTS

Projects are required to fulfill the objective portion of a rotation grade for elective rotations conducted by adjunct faculty preceptors, unless other objective testing methods are approved by the Director of Experiential Education. The project should be designed to focus on knowledge and/or skills incorporated at a rotation site during the course of the month. The student should consult with the primary preceptor at the rotation site to establish a suitable project to be completed by the end of the rotation. Projects may include, but are not limited to:

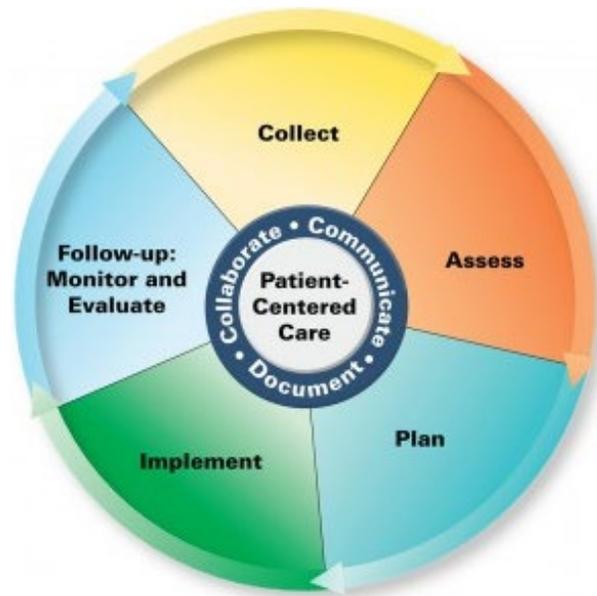
- an in-service with formatted handout or outline of Power-Point slides
- a drug information paper that answers a question of interest
- a medication utilization evaluation (MUE)
- a comprehensive review of a new drug
- development of patient education materials

#### Guidelines

1. Each project topic must be approved by the Director of Experiential Education or designee. Unless otherwise directed, topics and approval requests should be submitted using CORE ELMS Field Encounters through the "APPE Rotation Project Topic Submission". Project topics are due by the 5<sup>th</sup> working APPE day of the rotation.
2. Unless otherwise approved, each project must be typed in a word document format and should be submitted using CORE ELMS Field Encounters as an "APPE Project." A handout of PowerPoint slides is also acceptable provided other project criteria are met. Projects are due by midnight on the final working day of the rotation month and must be submitted on time.
3. Unless otherwise approved, each project must include citation of primary literature. Examples of primary literature include randomized controlled trial (RTC), systematic review and meta-analysis, cohort study, prospective, retrospective, case-control study, and case report and case series. Any variance from this requirement MUST be approved in writing no later than 7 days prior to the final working day of the rotation.
4. All references must be cited according to standard format as listed in the rotation manual (Appendix R).
5. Projects must be free of typographical and grammatical errors. Careful proofreading, spell check, and grammar check should be completed for each written project prior to submission.
6. All completed projects **must** contain the following information when submitted:
  - a. student name
  - b. project title
  - c. rotation site
  - d. month of rotation
7. Failure to adhere strictly to these guidelines for content/format/reference requirements and/or failure to meet specified deadlines may result in an Unsatisfactory grade and implications as described within the grading policies on pages 9-11 of this manual.

## APPENDIX N

### The Pharmacist's Patient Care Process



Using principles of evidenced-based practice, the pharmacist should:

#### Collect

The pharmacist assures the collection of necessary subjective and objective information about the patient in order to understand the relevant medical/medication history and clinical status of the patient. Information may be gathered and verified from multiple sources, including existing patient records, the patient, and other health care professionals. This process includes collecting:

- A current medication list and medication use history for prescription and nonprescription medications, herbal products, and other dietary supplements.
- Relevant health data that may include medical history, health and wellness information, biometric test results, and physical assessment findings.
- Patient lifestyle habits, preferences and beliefs, health and functional goals, and socioeconomic factors that affect access to medications and other aspects of care.

#### Assess

The pharmacist assesses the information collected and analyzes the clinical effects of the patient's therapy in the context of the patient's overall health goals in order to identify and prioritize problems and achieve optimal care. This process includes assessing:

- Each medication for appropriateness, effectiveness, safety, and patient adherence.
- Health and functional status, risk factors, health data, cultural factors, health literacy, and access to medications or other aspects of care.
- Immunization status and the need for preventive care and other health care services, where appropriate.

#### Plan

The pharmacist develops an individualized patient-centered care plan in collaboration with other health care professionals and the patient or caregiver that is evidence-based and cost effective. This process includes establishing a care plan that:

- Addresses medication-related problems and optimizes medication therapy.

- Sets goals of therapy for achieving clinical outcomes in the context of the patient's overall health care goals and access to care.
- Engages the patient through education, empowerment, and self-management.
- Supports care continuity, including follow-up and transitions of care as appropriate.

### **Implement**

The pharmacist implements the care plan in collaboration with other health care professionals and the patient or caregiver. During the process of implementing the care plan, the pharmacist:

- Addresses medication- and health-related problems and engages in preventive care strategies, including vaccine administration.
- Initiates, modifies, discontinues, or administers medication therapy as authorized.
- Provides education and self-management training to the patient or caregiver.
- Contributes to coordination of care, including the referral or transition of the patient to another health care professional.
- Schedules follow-up care as needed to achieve goals of therapy.

### **Follow-up: Monitor and Evaluate**

The pharmacist monitors and evaluates the effectiveness of the care plan and modifies the plan in collaboration with other health care professionals and the patient or caregiver as needed. This process includes the continuous monitoring and evaluation of:

- Medication appropriateness, effectiveness, and safety and patient adherence through available health data, biometric test results, and patient feedback.
- Clinical endpoints that contribute to the patient's overall health.
- Outcomes of care including progress toward or the achievement of goals of therapy.

### **Assessment of medication therapy should include:**

#### Appropriateness

- indication for each med?
- untreated indications?
- duplicate therapy?

#### Effectiveness

- goal(s) achieved?
- dosage too low?
- optimal meds?

#### Safety

- dosage too high (individualization)?
- adverse effects (AE)?
- drug reaction (drug-drug, drug-disease, drug diet)?
- monitoring parameters?

#### Adherence

- reason(s) for missing (schedule, cost, AE)?
- administration optimal?
- better alternatives?

## APPENDIX O

### PLAGIARISM: UNDERSTANDING IT AND HOW AVOID IT

From Donald A. Sears, Harbrace Guide to the Library and the Research Paper, 2<sup>nd</sup> ed. (New York, 1960), pp. 33-38; three deletions.

. . . It will be well to ask yourself if you fully understand what constitutes PLAGIARISM, for the range of meaning of the word is wide. At one extreme is the gross offense of trying to pass off as one's own the exact words of another; at the other extreme is the subtle manner of "borrowing a fine phrase to dress up one's own writing." In between are varying degrees of plagiarism that often puzzle a student. Through ignorance a student may in all honesty misuse his sources in such a way that he is guilty of plagiarism; but he is nonetheless guilty, for ignorance cannot be an acceptable excuse for wrongdoing.

An analogy to other kinds of dishonesty may help. To use another's words or ideas is roughly the intellectual equivalent of stealing the funds of a dormitory, fraternity, cooperative house, or sorority for one's own use. However, funds are made up of concrete money; words and ideas are abstract, and consequently the line between honest and dishonest use may be harder to define. There are, of course, correct and honorable ways of using sources just as there are correct and honorable ways of borrowing money. Forms of acknowledgement have to be included with your use of source material in the same way that legal forms have to be filled out before a bank will let you use its money. . .

1. WORD-FOR-WORD PLAGIARISM. This includes (a) the submission of another student's work as one's own; (b) the submission of work from any source whatever that is not properly acknowledged by footnote, bibliography, or reference in the paper itself; (c) the submission of any part of another's work without proper use of quotation marks.
2. PATCHWORK-QUILT PLAGIARISM. As our grandmothers used to put together large quilts out of scraps of cloth, a student may make the mistake of passing off as an original paper one that is stitched together with phrases and sentences taken from his sources. If he does not include quotation marks around all such borrowings he is committing plagiarism. Here rearrangement of phrases into a new pattern does not confer originality.
3. UNACKNOWLEDGED PARAPHRASE. An author's discovery of fact or original interpretation of fact is as much his property as his exact words are. Restatement by means of paraphrase does not remove the necessity of giving credit to the original sources. . .

The development of intellectual honesty is a primary goal of college education. Plagiarism - besides being dishonest in itself - defeats this purpose of college. When detected it is always severely punished, usually by expulsion. When undetected, punishment is nevertheless certain in the intellectual corruption of the plagiarizer.

## APPENDIX P

### Preceptor Evaluation Form

(to be completed online by the student)

Preceptor \_\_\_\_\_ Student \_\_\_\_\_

At the end of the rotation, rank each evaluation item 1 - 10 according to the scale 0 - 4 where:

- 0 = unable to rate on this item
- 1 = needs improvement/disagree
- 2 = average/somewhat agree
- 3 = very good/agree
- 4 = excellent/strongly agree

1. Sufficient orientation to the site was provided.
2. Activities were consistent with learning objectives or expectations.
3. The preceptor(s) displayed enthusiasm for teaching.
4. Opportunity for active participation was provided.
5. Clarification or explanation was provided when feasible.
6. Constructive feedback was provided to improve learning.
7. Activities and discussions stimulated my thinking and memory.
8. The site environment promoted learning.
9. The experience contributed to my growth or broadened my perspective.
10. My expectations for learning were met or exceeded.

Free text questions:

11. What were the most positive aspects of the learning experience?
12. In what ways might the learning experience be improved for future students?
13. Would you like to nominate the primary preceptor for an award for providing an outstanding experience? (not required)    Yes    No

If yes, please provide comments supporting your nomination.

## APPENDIX Q

### Preceptor Responsibilities to the Experiential Education Program

1. Preceptors are expected to maintain contemporary pharmacy practices sufficient to facilitate experiential education for doctor of pharmacy students at any level of the professional curriculum. Contemporary pharmacy practice is evidenced by these activities:
  - a. active participation with a health care team and provision of therapeutic recommendations to team members
  - b. obtaining patient health information (physical findings, laboratory, medication history, and medical history) commensurate with the type of pharmacy practice
  - c. dispensing prescription medications within the facility's guidelines
  - d. providing verbal or written medication use information to other health care providers
  - e. gathering and organizing patient specific information to identify potential or on-going drug therapy problems. Specific activities may include but are not limited to:
    - obtaining a history (of medications and medical problems) from a patient
    - reviewing medical records (to gain admission history, physical findings, past medical history, medications ordered and received, laboratory and radiological data)
    - reviewing pharmacy records (for active orders, medications dispensed or discontinued)
    - reviewing other patient records that may provide information needed to evaluate or solve problems of drug therapy
  - f. obtaining and interpreting the evidence in the medical literature supporting the appropriate use of medications to optimize drug therapy outcomes
  - g. developing therapeutic plans (including prescription and non-prescription medication selection, dosing, and monitoring plans)
  - h. providing patients with education about their medication(s) or disease(s) in an ambulatory setting or prior to discharge from an acute care setting
  - i. documenting pharmacy work in an appropriate medical record and/or pharmacy patient profile
  - j. providing follow-up phone calls or visits with patients or communicating with involved health care providers to assure that optimal therapeutic outcomes are attained and maintained
  - k. providing specialized patient and non-patient care activities that support unique roles of pharmacists
2. All assigned Oklahoma pharmacists will have current, valid, and unrestricted pharmacist and preceptor licenses issued by the Oklahoma State Board of Pharmacy.
3. Preceptors will directly supervise and be responsible for all patient care activities (provision of pharmacy services, drug information, communication of therapeutic plans to health care providers, and communications with patients) provided by doctor of pharmacy students. Direct involvement in the patient care activities outlined in no. 1 above is essential for developing professional competence and for providing meaningful assessment of student performance.

4. Evaluations must be conducted for all students assigned and be submitted to the Office of Experiential Education upon completion.
  - A mid-point performance evaluation must be documented in writing and verbally reviewed with each student no later than the 17<sup>th</sup> of each month. If the mid-point evaluation is below expectations, a specific, written plan for improvement must be developed and signed by the student and preceptor, and the Director of Experiential Education must be notified by the preceptor and provided a copy of the plan for improvement.
  - A final performance evaluation must be documented in writing and verbally reviewed with each student by the final day of the month. The final evaluation must be submitted online or by fax by the end of the final rotation day. Regardless of the avenue a preceptor selects to submit the final evaluation, it should be reviewed by both the student and preceptor. A printed copy of the evaluation should be provided to the student only if the evaluation was not completed and submitted online. If the final evaluation is submitted to the college by fax, both the student and the preceptor should sign and date the evaluation and a signed copy should be provided to the student.
  - In all cases where it is possible (that is, those with a computer compatible with the available assessment software), student evaluations must be submitted electronically.

## APPENDIX R

### REFERENCE CITATION FORMATTING

Many North American and British journals require that submitted manuscripts meet certain standardized requirements (N Engl J Med 1997;336:309-15). Included in these requirements are guidelines for citation of references as adopted by the U.S. National Library of Medicine and used in Index Medicus. References should be numbered consecutively in the order in which they are first mentioned in the text. The titles of journals should be abbreviated according to the style used in Index Medicus. A "List of Journals Indexed" which includes the accepted journal abbreviations is printed annually in the January issue of Index Medicus. The abbreviations can also be found under "complete reference" when performing an OVID search.

#### Examples of Correct Forms of References

<b>Journals</b>	
Standard Journal Article (List all authors when $\leq 6$ ; when $\geq 7$ , list only first 6 and add et al.) Only capitalize the first word and proper names in the article title.	Parkin DM, Clayton D, Black RJ, Masuyer E, Friedl HP, Ivanov E, et al. Childhood leukaemia in Europe after Chernobyl: 5 year follow-up. Br J Cancer 1996;73:1006-12.
Organization as Author	The Cardiac Society of Australia and New Zealand. Clinical exercise stress testing. Safety and performance guidelines. Med J Aust 1996;164:282-4.
No Author Given	Coffee drinking and cancer of the pancreas [editorial]. Br Med J 1981;283:628.
Journal Supplement	Shen HM, Zhang QF. Risk assessment of nickel carcinogenicity and occupational lung cancer. Environ Health Perspect 1994;102 Suppl 1:275-82.
Journal Paginated by Issue	Seaman WB. The case of the pancreatic pseudo-cyst. Hosp Pract 1981 Sept;16:24-5.
<b>Books and other Monographs</b>	
Personal Author(s)	Eisen HN. Immunology: an introduction to molecular and cellular principles of the immune response. 5th ed. New York: Harper and Row; 1974.
Editor, Compiler, Chairman as Author	Dausset J, Colombani J, editors. Histocompatibility testing 1972. Copenhagen: Munksgaard; 1973.
Chapter in a Book	Weinstein L, Swartz MN. Pathogenic properties of invading microorganisms. In: Sodeman WA Jr, Sodeman WA, editors. Pathologic physiology: mechanisms of disease. Philadelphia: WB Saunders; 1974. p. 465-78.
Published Proceedings Paper	DuPont B. Bone marrow transplantation in severe combined immunodeficiency with an unrelated MLC compatible donor. In: White JH, Smith R, editors. Proceedings of the 3rd annual meeting of the International Society for Experimental Hematology. 1974 Sep 6-10; Dallas (TX). Houston: International Society for Experimental Hematology; 1974. p. 44-6.
Monograph in a Series	Hunninghake GW, Gadek JE, Szapiel SV. The human alveolar macrophage. In: Harris CC, editor. Cultured human cells and tissues in biomedical research. New York: Academic Press; 1980. p. 54-6. (Stoner GD, editor. Methods and perspectives in cell biology; vol 1).
Agency Publication	Ranofsky AL. Surgical operations in short-stay hospitals: United States – 1975. Hyattsville (MD): National Center for Health Statistics; 1978. DHEW publication no. (PHS) 78-1785. (Vital and health statistics; Series 13; No. 34).

Dissertation or Thesis	Cairns RB. Infrared spectroscopic studies of solid oxygen [dissertation]. Berkeley (CA): Univ. California; 1965.
<b>Other Articles</b>	
Newspaper Article	Shaffer RA. Advances in chemistry are starting to unlock mysteries of the brain: discoveries could help cure alcoholism and insomnia, explain mental illness. How the messengers work. Wall Street Journal 1977 Aug 12:1 (col.1), 10 (col.1).
Magazine Article	Roueche B. The Santa Claus culture. The New Yorker 1971 Sep 4:66-81.
The style for subtitles follows that for titles. A colon separates title and subtitle. If the subtitle is numbered, use a Roman numeral followed by a period.	Milunsky A. Prenatal detection of neural tube defects: VI. Experience with 20,000 pregnancies. JAMA 1980;244:2731-5.
Reference to an abstract of an article should be permitted only when the original article is not readily available (e.g., foreign language articles or papers presented at meetings but not yet published). If possible, references for both the original article and the abstract should be given.	Kremer H. Ultrasonic diagnosis in infiltrative gastrointestinal diseases. Dtsch Med Wochenschr 1978;103:965-6. Abstracted, JAMA 1978;240:2784.
<b>Electronic Material</b>	
Journal Article in Electronic Format	Morse SS. Factors in the emergence of infectious diseases. Emerg Infect Dis [serial online] 1995 Jan-Mar [cited 1996 Jun 5];1(1):24 screens]. Available from: URL: <a href="http://www.cdc.gov/ncidod/EID/eid.htm">http://www.cdc.gov/ncidod/EID/eid.htm</a> .
Monograph in Electronic Format	CDI, clinical dermatology illustrated [monograph on CD-ROM]. Reeves JRT, Maibach H. CMEA Multimedia Group, producers. 2nd ed. Version 2.0. San Diego: CMEA; 1995.
Computer File	Hemodynamics III: the ups and downs of hemodynamics [computer program]. Version 2.2. Orlando (FL): Computerized Educational Systems; 1993.

### Footnoting and Other Considerations

Each reference should be cited in the text. Citations may also be made in tables, figures, and legends. Use Arabic superscript numerals. These numerals appear outside periods and commas, and inside colons and semicolons. When more than two references are cited at a given place in the copy, use hyphens to join the first and last numbers of a closed series; use commas without space to separate other parts of a multiple citation.

Example: As previously reported,<sup>1,3-8,19</sup>  
The derived data were as follows<sup>3-7</sup>:

When mentioned in the text, only surnames of authors are used. For a two-author reference, give both surnames. For references with more than two authors, use the first author's surname followed by "et al," "and associates," "and others," "and co-workers," or "and colleagues."

Example: Doe<sup>7</sup> reported on the survey  
Doe and Roe<sup>8</sup> reported on the survey  
Doe et al<sup>9</sup> reported on the survey

## Reference

1. International Committee of Medical Journal Editors. *Ann Intern Med* 1988; 108:266-73.

## Bibliographic Procedures for Selected Reference Examples

1. Huff BB, ed. Physicians' desk reference. 36th ed. Oradell: Medical Economics Co., 1984:1184.
2. McEvoy GK, ed. American hospital formulary service drug information 1984. Bethesda: American Society of Hospital Pharmacists, 1984:312.
3. Amikacin sulfate monograph. In: Boyd JR, ed. Facts and comparisons. St. Louis: JB Lippincott Co., 1984:349a.
4. Drug evaluation: Metoclopramide In: Gelman CR, Rumack BH. Drugdex. Englewood: Micromedex, Inc., 1984.  
  
Lee M. Drug consult: Vidarabine - Therapy of disseminated herpes zoster infection. In: Gelman CR, Rumack BH. Drugdex. Englewood: Micromedex, Inc., 1984.
5. Amikacin package insert. Bristol Laboratories, 1984.
6. Product information: Pindolol (VIS-101). Sandoz Pharmaceuticals, 1984.\*
7. Protection of human subjects. Federal Register 1977;42(Jan 14):3076-91.

\*Most of the information supplied by a drug company on a particular drug (e.g., pamphlets, leaflets, brochures) can be referenced under "product information". However, to provide the most specific citation for this information, include the reference identification number which should be printed somewhere on the publication (usually the back). In the example above, "VIS-101" is the identification number found on the pindolol brochure cited. Information described specifically as "technical information" should be cited as such and the citation should follow the same guidelines used for "product information".

### 8. Secondary Citations

In some instances it may be necessary to reference an article or other information that is unavailable in the DIS and medical library, but has been referenced in another source. In these instances, both the cited information and the source that references this information should be included in the reference.

Example: Raftos J. The use of "catapres" in the treatment of severe hypertension. *Med J Aust* 1969;2:684-7 (cited by Collins IS, King IW) *Curr Ther Res* 1972;14:185-94.

Product information: Zomax. McNeil Pharmaceuticals, 1980 (cited in Drug evaluation: zomepirac. Drugdex. Englewood: Micromedex, Inc., 1982).

### 9. Personal Communications

Do not include "personal communications" in the list of references. Instead, reference to a personal communication should be made in the text of the paper. The following forms may be used:

In a conversation with H.E. Martin, MD (August 1966).....

According to a letter from H.E. Martin, MD in August 1966.....

Similar findings have been noted by A.B. Roberts, Pharm.D., and by H.E. Martin, M.D. (written communication, August 1966).

Note that the author should give the date of the communication and indicate whether it was in conversation or in writing. Highest academic degrees should also be given.



## **APPENDIX S**

### **REQUIRED ROTATION DESCRIPTIONS AND OUTCOMES STATEMENTS**

#### **REQUIRED ADULT MEDICINE/CRITICAL CARE ROTATION**

##### **General Description**

The focus of this rotation is to provide the student with the opportunity to acquire and practice skills in the delivery of pharmaceutical care to patients managed in inpatient settings.

##### **Outcome Statements**

Upon completion of this experiential training, a successful student will be able to:

1. Obtain and record patient medication histories that document previous pharmacotherapy, allergies or drug-induced symptoms, noncompliance, or drug misuse that may affect the development of a treatment plan.
2. Use pertinent information gained from the patient/parent/caregiver interview and medical record to:
  - a. Identify patient problems that may be better treated with alteration of current drug therapy.
  - b. Develop a goal of therapy for each problem.
  - c. Consider alternative treatment strategies for each problem.
  - d. Construct monitoring parameters for each problem.
  - e. Recommend alterations in drug therapy when outcomes are not reached or adverse effects occur.
  - f. Monitor for possible drug interactions.
3. Counsel patients and/or their parents/caregivers during their stay and upon discharge regarding the appropriate use of therapeutic agents in their regimen.
4. Work with nursing staff to ensure the safe, appropriate administration of medications.
5. Act as a liaison between the pharmacy department and patient care areas to optimize drug delivery.
6. Speak with authority on the pathophysiology and the pharmacotherapeutic and pharmacokinetic management of disease states commonly encountered in the inpatient population.
7. Provide accurate, unbiased drug information to health care practitioners.
8. Utilize and critically evaluate the drug literature in accomplishing the above objectives.
9. Document clinical activities including admission medication interviews, discharge counseling, pharmacokinetic consultations, and recommendations leading to therapeutic alterations or dosage changes.
10. Communicate effectively with other health care providers.

## **REQUIRED AMBULATORY CARE ROTATION**

### **General Description**

The focus of this rotation is to provide the student with the opportunity to acquire and practice skills in the delivery of pharmaceutical care to patients managed in outpatient settings.

### **Outcome Statements**

Upon completion of this experiential training, a successful student will be able to:

1. Obtain from a patient and document in an appropriate format the following information: pertinent subjective and objective history, medication history, and any other pertinent information that may directly affect the intended therapeutic plan for that patient.
2. Manage a patient's drug therapy by advising health care providers in the design of a rational pharmacological or non-pharmacological treatment plan, by using established therapeutic protocols, or by independently initiating or adjusting drug therapy under the supervision of the preceptor or designated responsible physician.
3. Monitor the safety and efficacy of established drug therapy by appropriately using physical assessment, laboratory data, and information gained during a patient interview and/or by medical record review.
4. Provide accurate, unbiased drug information to health care practitioners.
5. Evaluate the validity of conclusions stated in the medical and pharmacy literature.
6. Refer the patient, when appropriate, to other health care providers for the management of disorders.
7. Participate in or recommend alternative methods of administering medications to ambulatory patients when appropriate.
8. Identify noncompliance and initiate strategies to correct this undesirable patient behavior.
9. Educate and counsel patients, the general public, and health care providers in the proper use of medications and drug delivery systems.
10. Communicate effectively, both verbally and in writing, with other health care providers.

## **REQUIRED COMMUNITY PHARMACY ROTATION**

Overall Goal: To demonstrate the provision of Pharmaceutical Care in the community setting.

Extent and emphasis of the activities listed below will be selected by each preceptor, according to those available at the rotation site.

### **I. Patient Care:**

Give the student the opportunity to provide patient care by:

- A. Interviewing the patient to maintain current patient profiles, including allergies, medical conditions, medical history, and special needs.
- B. Effectively reviewing patient profiles to accomplish an appropriate drug utilization review, using the following steps:
  1. Evaluation of the patient's history of adverse effects
  2. Detection of potentially unwarranted medication changes
  3. Review for potential quantitative misuse of medications
  4. Review for duplication of medications
  5. Evaluation of potentially unwanted additive effects of medications
  6. Review for inappropriate dose, route, schedule, or dosage form
  7. Detection of possible adverse drug effects
  8. Review for drug-drug and drug-food interactions
  9. Review for drug-disease interactions
  10. Review for possible irrational therapeutics
- C. Communicating drug information and pertinent patient information to other health care professionals.
- D. Providing appropriate information and advice to patients, using appropriate counseling techniques and utilizing terminology appropriate to the patient's level of understanding and confirming this understanding.
- E. Guiding non-prescription drug selection based on symptoms/need, concomitant prescription drug use, and concomitant disease states.
- F. Providing advice/information concerning non-prescription drug use, problems and management, utilizing terminology appropriate to the patient's level of understanding.
- G. Recognizing and communicating to the patient the need for referral to other health care providers.
- H. Monitoring patients for appropriate drug outcomes.

### **II. Drug Preparation and Distribution:**

The student will have a working knowledge of the drug preparation and distribution systems of the pharmacy and be able to:

- A. Determine correctness and completeness of a given prescription.
- B. Identify potential and actual prescription preparation problems and develop appropriate plans of action for resolution.
- C. Utilize appropriate reference materials to satisfy drug information needs to properly dispense medications.
- D. Perform necessary determinations for accurate filling and/or compounding of prescriptions, including quantities to dispense, concentration determinations, drug additive quantities.

- E. Discuss prescription pricing and reimbursement issues.

### **III. Pharmacy Management and Administration:**

The student will demonstrate an understanding of the administrative responsibilities involved in operating a pharmacy by:

- A. Describing required record keeping practices to meet state and federal laws concerning prescription files, prescription drug inventory, employee files, etc.
- B. Discussing general management policies of the pharmacy and participating in the opening and closing of the pharmacy.
- C. Discussing the participation and management of 3rd party payer programs.
- D. Identifying the state and federal licensing requirements for pharmacies.
- E. Discussing procedures for resolution of dispensing errors.
- F. Describing security systems and discussing reasons for security measures.
- G. Discussing and understanding the role of pharmacy technicians.

### **IV. Drug Policy Management:**

Involve the student in different drug management policies in a pharmacy by having the student describe the drug management policies including:

- A. The Drug Use Evaluation process.
- B. The procedure for reporting and documenting medication errors and adverse drug reactions and tracing the steps in the ADR reporting program.
- C. The formulary systems in the store or third-party systems.
- D. The difference between brand name and generic equivalence and how this affects inventory and operations.
- E. Policies of selling to other stores and/or physicians' offices.
- F. Any current or anticipated pharmacoeconomic issues.

### **V. Purchasing and Inventory:**

Provide the student with an overview of purchasing and inventory and their impact upon general operations regarding areas such as budgeting, bookkeeping procedures, pricing policies, and application of computer systems. The student will be able to:

- A. Trace the inventory control activities, including ordering, checking, stocking, and physical inventory control.
- B. Identify and perform required procedures for ordering, inventory, and prescription filing of controlled substances.
- C. Demonstrate a familiarity with new product purchasing and inventory controls.
- D. Discuss the procedure for the handling of manufacturer recalls of medications.
- E. Describe the procedure for handling of non-formulary or non-stocked drug orders or requests.

### **VI. Specialty Practice Functions:**

The student will be able to describe specialty areas of the pharmacy, if applicable, in sufficient detail to identify the nature of the activity at the specific pharmacy.

Examples: ostomy products, home diagnostic products, specialty compounds, information center, veterinary products, diabetic and pulmonary equipment, and medical supplies and equipment.

## REQUIRED HOSPITAL PHARMACY ROTATION

Overall Goal: To demonstrate the provision of Pharmaceutical Care in the acute care setting.

Extent and emphasis of the activities listed below will be selected by each preceptor, according to those available at the rotation site.

### I. **Patient Care:** The student will provide patient care by:

- A. Demonstrating proper oral and written communication skills by:
  - 1. Taking patient medication histories.
  - 2. Providing patient counseling.
  - 3. Accurately providing drug information to other health professionals.
- B. Utilizing a medication record system to detect:
  - 1. A patient's history of adverse effects.
  - 2. Potential unwarranted medication changes.
  - 3. Potential quantitative misuse of medications.
  - 4. Duplication of medications.
  - 5. Potential unwanted additive effects of medications.
  - 6. Inappropriate dose, route, schedule, or dosage form.
  - 7. Possible adverse effects.
  - 8. Drug-drug and drug-food interactions.
  - 9. Drug-disease interactions.
  - 10. Possible irrational therapeutics.
- C. Demonstrating the application of pharmacokinetic principles to patient care.
- D. Establishing patient outcome parameters and monitoring those parameters.

### II. **Drug Preparation and Distribution:** The student will have a working knowledge of the drug preparation and distribution systems of the institution and be able to:

- A. Interpret medication and IV admixture requests, determine their accuracy, completeness, and legality, and prepare an appropriate label for the medication according to the institution's guidelines.
- B. Describe controlled substance laws and the institution's procedure for dispensing controlled substances.
- C. Participate in the institution's medication delivery system including:
  - 1. Reviewing orders for appropriateness against the patient profile, making additions to, and deletions from this record, and understanding the steps necessary to clarify a questionable order.
  - 2. Accurately filling unit dose orders.
  - 3. Accurately filling bulk medication orders including selecting the appropriate container.
  - 4. Demonstrating proper aseptic technique and the ability to extemporaneously prepare admixture solutions.
  - 5. Recalling common IV incompatibilities and reference sources for information concerning parenteral drug and solution administration, stability, and compatibility.
- D. Demonstrate the ability to accurately perform pharmacy calculations (e.g., IV admixtures, drip rates, and extemporaneously compounded products).

- E. Describe the hospital's procedure for dealing with outpatient prescriptions.
- F. Demonstrate the use of auxiliary labeling to aid the nurse in administering medications and intravenous admixtures.
- G. Participate in the manufacturing and/or repackaging of a pharmaceutical product including tracing the controls and records that should be used to ensure the quality of the finished product.
- H. Discuss the application of satellite pharmacy services, drug information centers, and clinical services to institutional practice.

**III. Pharmacy Management and Administration:** The student will demonstrate an understanding of the administrative responsibilities involved in operating a hospital pharmacy department by:

- A. Describing and/or attending pharmacy related hospital committee meetings and describing the purpose, function, and line of responsibility of each - especially the Pharmacy and Therapeutics and Quality Assurance committees.
- B. Describing the lines of communication and shared responsibilities of other health related areas that interact with the pharmacy department.
- C. Explaining some Policies and Procedures of the hospital and discussing standards and guidelines of the Joint Commission on Accreditation of Healthcare Organizations.
- D. Identifying the role and activities of pharmacy technicians.
- E. Identifying the organizational structure of the pharmacy department.

**IV. Drug Policy Management:** The student will demonstrate familiarity with different drug management policies in hospital pharmacy by:

- A. Participating in and/or describing the Drug Use Evaluation process taking place in the institution.
- B. Describing the institution's policies and procedures for handling investigational drugs.
- C. Identifying the procedure for reporting and documenting medication errors and adverse drug reactions and explaining the steps in the institution's ADR reporting program.
- D. Identifying the procedure for the handling of "meds from home" and drug samples.
- E. Describing the institution's formulary system.
- F. Describing the difference between therapeutic and generic equivalence and how this affects the formulary.
- G. Describing any current or anticipated pharmacoeconomic issues.

**V. Purchasing and Inventory:** The student will be able to demonstrate an understanding of purchasing and inventory and their impact upon general operations regarding areas such as budgeting, bookkeeping procedures, pricing policy, and application of computer systems by:

- A. Explaining the inventory control activities including ordering, checking, stocking, and physical inventory control.
- B. Discussing procedures involved in ordering controlled substances.
- C. Discussing the procedure for the handling of manufacturer recalls of medications.
- D. Describing the procedure for handling of non-formulary or non-stocked drug requests.

**VI. Specialty Practice Functions:** The student will describe specialty areas of the pharmacy, if applicable, in sufficient detail to identify the nature of the activity. Examples: satellites (e.g., surgery, oncology), outpatient pharmacy, drug information, investigational drug services, specialty clinical services (e.g., kinetics, pain control, nutrition).



## APPENDIX T

### Student Testing Expectations for OU-COP Exams in ExamSoft/Examplify

#### Arrival Time:

- Students should arrive approximately 5 minutes before an exam to view the seating chart. They should enter the classroom quietly and take their seat once the proctor opens the door. The only items students should have when seated are their laptop, power cord, and whiteboard/dry erase marker/eraser. Other items must be in their backpack.
- All study notes and applications must be closed before entering the classroom. A student must be logged into Examplify and ready to start the exam at the designated time.

#### Exam Preparation:

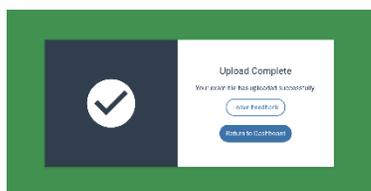
- NO TALKING is allowed during the exam.
- NO watches, fitbits or hats should be worn.
- Cell phones and all other electronic devices, including smart watches and tablets, must be turned OFF/airplane mode (not silenced) and left at the front of the classroom in student backpacks. Each of these devices use a wifi connection and can interfere with exam connectivity.
- It is academic misconduct to have a cell phone or smart watch anywhere on your person during an exam.
- Clean whiteboards should be shown (front/back) before and after an exam.

#### Exam Start-Time:

- Students should be in their assigned seat with Examplify open and ready to launch the exam at the designated start time. Students must close (not minimize) all other applications before opening Examplify.
- Once the classroom door is closed, it is at the proctor's discretion whether a student may enter the classroom once the password has been shown.

#### Exam Submission and End-Time:

- Before exiting the classroom, students must show the GREEN submission screen to the proctor, along with the erased white board. The College of Pharmacy faculty require students to show the GREEN submission screen and not the desktop.



- Exams scores will be finalized in ExamSoft/Examplify within 72 hours after the exam.
- Students can review their Strengths and Opportunities Report in ExamSoft 48-72 hours after an exam.

#### Technical Issues:

- Students should test their laptops and update Examplify. Most technical issues are successfully resolved after a student FULLY shuts down and reboots/restarts the computer. After restarting the computer, ALL other running applications/browsers should be closed before opening Examplify. System updates should also be checked periodically to prevent issues.
- Students should use wifi@ou to connect.
- If an issue arises during an exam, a student MUST notify a proctor. Students may not exit the exam without notifying the proctor. Early exits are monitored and this is considered academic misconduct. This pertains to all exams, including make-up exams.

## APPENDIX U

### TECHNICAL STANDARDS FOR DOCTOR OF PHARMACY PROGRAM

The University of Oklahoma College of Pharmacy is committed to full compliance with the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990. An applicant for the Doctor of Pharmacy degree must have abilities and skills in the five areas listed below, as pharmacists must be capable of independently functioning in the delivery of health care. Accommodations will be made for qualified individuals with disabilities, providing such accommodation does not pose an undue hardship, would not result in a fundamental alteration in the nature of the program, service, or activity, or pose an undue financial or administrative burden. All applicants must meet the fundamental technical standards of the program set forth below. Applicants accepted for the Doctor of Pharmacy degree program will be expected to demonstrate proficiency and continue to meet the required technical standards in these five areas over the course of the program. Applicants accepted for the Doctor of Pharmacy degree program will be expected to meet these technical standards in interactions with all personnel associated with organizations related to the Doctor of Pharmacy degree program over the course of the program.

#### **Observation**

An applicant must be able to observe demonstrations and experiments in the basic and pharmaceutical sciences. An applicant must be able to observe patients, other professionals, and professional equipment and supplies accurately both at a distance and in close proximity. Observation necessitates the functional use of the sense of vision and somatic sensation.

#### **Communication**

An applicant must be able to speak, hear, and observe patients in order to elicit information, describe changes in mood, activity, and posture, and perceive nonverbal communications. An applicant must be able to communicate effectively and sensitively with patients. Applicants must be able to communicate effectively and efficiently in oral and written form with members of the health care team.

#### **Motor**

Applicants must have sufficient motor functions to elicit information from patients by palpation, auscultation, percussion, and other diagnostic maneuvers. An applicant must be able to perform basic laboratory tests. An applicant must be able to execute motor movements to provide general care and emergency treatments to patients, e.g., first aid treatments, cardiopulmonary resuscitation. An applicant must be able to execute motor movements required in the compounding of medications inclusive of using techniques for preparing sterile solutions, e.g., parenteral or ophthalmic solutions. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

#### **Intellectual-Conceptual, Integrative, and Quantitative Abilities**

These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of pharmacists, requires all of these intellectual abilities. In addition, an applicant must be able to comprehend three dimensional relationships and to understand the spatial relationships of structures.

#### **Behavioral and Social Attributes**

An applicant must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment and the prompt completion of all responsibilities including, but not limited to, those related to the care of patients, and the development of mature, sensitive, and effective relationships with patients and other health care providers. Applicants must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties in the clinical setting. Compassion, integrity, concern for others, interpersonal skills, interest, and motivation are all personal qualities that are assessed during the admissions and education processes.

[Technical-Standards-V2-Doctor-of-Pharmacy-1.pdf](#)