Our mission is to advance societal health through leadership in pharmacy education, research, community engagement, and improved patient care.

Faculty Responsible for the Course:

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General Catalog Description, Course Credits, & Prerequisites:

PHAR 760 Introduction to Institutional Health Systems (2 credits; may be repeated for up to 6 credits) The goal of this course is for students to gain familiarity with the provision patient centered care by experiencing a selection of acute care pharmacy services offered within the institutional health systems pharmacy. The experiences include introduction to inpatient pharmacy, acute care clinical pharmacy services, transitions of care, longitudinal project, and APPE Student Topic/Case Presentation. The emphasis is on learning how the pharmacy team in this environment collectively provide patient centered care and ensure patient medication safety. Students, through the experiences stated above, will know the various roles of the pharmacy personnel and how they utilize processes, protocols, and policies for preparing and distributing medication, collecting and analyzing relevant patient information, and providing guidance regarding medication administration and monitoring.

Graded P/N

PREREQS: Oregon pharmacy intern license required.  COREQS: PHAR 761 and PHAR 764

Course Specific Measurable Student Learning Outcomes (SLOs) & Linkage to Program Level Student Learning Outcomes (P-SLOs):

1. Know the operational organization of the Pharmacy Department (P-SLO: 2.3; 2.3.2; 3.4.1,3.5.1)
   a) Know the roles and responsibilities of the various Pharmacy personnel e.g. administration, staff pharmacists, technicians, clerk.
   b) Know the types of staffing models/schedules e.g. AM, PM, Swing, Overnight, Centralized, De-Centralized.
   c) Know the types of pharmacy services offered and the purpose of each as it pertains to the delivery of care.
2. Know how to prepare drug products appropriately for distribution and administration to patients. (SLO: (P-SLO: 1.1.1, 1.1.2, 1.1.3, 1.1.4, 2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5, 3.6.2, 3.6.3, 4.4.3)
   a) Know the various parts of a patient chart including medication orders, progress notes (Physician, Pharmacist, Nursing) and laboratory values
   b) Describe the preparation and drug distribution system and workflow.
   c) Read and interpret a drug order and how to enter all needed information into the EMR.
   d) Prepare sterile drug products utilizing aseptic technique.
   e) Perform pharmacy calculations accurately and in a timely manner.
   f) Know the types of technology used e.g., Auto Med Cabinet, Bar coding system, Carousel, EMR, TPN machines, Pumps, WOWs etc.
   g) Conduct a medication review of a patient and identify any potential and/or actual drug-related problems.
   h) Utilize findings from electronic chart review to identify discrepancies, redundancies and omissions and assist with an appropriate course of action.

3. Develop an understanding of the Patient Centered Care process as outlined by the Joint Commission of Pharmacy Practitioners (JCPP), “Pharmacists use a patient-centered approach in collaboration with other providers on the health care team to optimize patient health and medication outcomes.” Using principles of evidence-based practice pharmacists: Collect, Assess, Plan, Implement, and Follow-up: Monitor and Evaluate (P-SLO: 1.1.1, 1.1.2, 1.1.3, 1.1.4, 2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5, 3.6.2, 3.6.3, 4.4.3)
   a) Accurately gathers and organizes all relevant subjective and objective information (e.g., comprehensive medication list, allergies, medical history, pertinent lab/physical assessment findings, and social determinants of health).
   b) Evaluates drug therapy regimen for appropriateness in achieving optimal patient outcomes (considering safety, efficacy, adherence). Appropriately prioritizes potential or current pharmacotherapy problems.
   c) Develops or revises, implements, and evaluates a patient-centered care plan to optimize drug therapy and clinical outcome.

4. Develop an understanding of the inventory used in this setting. (P-SLO: 2.2.1; 2.2.2)
   a) Demonstrate knowledge of preparation/receipt of inventory stock orders and emergency drug procurement.
   b) Know the various medication formulations used and the proper storage.
   c) Review medications for appropriate dating and demonstrate knowledge of procedure for disposal of expired medications.
   d) Understand dispensing and record keeping for controlled substances.
5. Know the legal, professional and regulatory requirements in pharmacy practice. (P-SLO: 2.4.1, 2.4.2, 3.5.1, 3.5.2, 3.5.3, 4.4.3)
   a) Describe the role of the Joint Commission or other accrediting body.
   b) Know pertinent the Board of Pharmacy rules in this setting.
   c) Understand the functional role of the committees such as the Pharmacy and Therapeutics (P&T) Committee.
   d) Describe policies and procedures for preventing and handling medication errors.

6. Know the appropriate behavior needed to interact with members of the health care team and patients. (P-SLO: 2.4.1, 2.4.2, 3.5.1, 3.5.2, 3.5.3, 4.4.3)
   a) Take responsibility for attaining excellence in providing care as a team member of the pharmacy department.
   b) Know the appropriate level of verbal and written communication used in this setting.
   c) Response to request in a timely manner.

Student & Attendance Requirements for Credit and Evaluation of Performance:

PHAR 760 is comprised of 5 separate experiential activities designed to provide students with a more complete perspective of Health Systems Pharmacy. The rotation schedule must be created in conjunction with the preceptor and approved by the Assistant Dean of Experiential Education at the beginning of each term.

- Inpatient Pharmacy
- Acute Care Clinical Service
- Transitions of Care
- APPE topic/case discussions
- Longitudinal Project

Total minimum hours is 120 and Final Phar 760 Packet and Evaluation.

Students must complete all of the activities and contact hours as stated in the syllabus and the experience specific manuals (intro to hospital, med red, and acute care). **Attendance for both CLASS meetings and PHARMACY rotations are mandatory.** If the student is unable to attend the assigned schedule, the student must inform the preceptor and will receive an incomplete until the time is made up to the satisfaction of the preceptor and the course instructor. If the student does not attend mandatory class meetings, the student may receive an incomplete and fail the course. Student will notify Office of Pharmacy Experience Programs of any changes to their schedule and absences.

Learning Resources:

**Suggested Texts/Materials:**

Include: OHSU library, various hospital medical libraries, textbooks, journals, carefully chosen websites, class notes. Readings are as assigned. Suggested references to have on hand at the clerkship site:

- Drug Information Handbook
- Therapeutics Text or Handbook
- Redbook
- Facts and Comparisons
- OSU Syllabi and Corresponding Rotation Manual

**Learning Management/Tracking Systems:**
The OSU/OHSU College of Pharmacy uses E*Value which is a comprehensive web based system to facilitate the management of many aspects of the Experiential Education Program. Preceptors and students have access to the system and allow individuals to the ability to update demographic information, view rotation assignments, rotation manuals/syllabi/forms, complete evaluation forms, and view student evaluation reports for various aspects of the rotation. This web-based system is also used to help assign rotations throughout all professional years. Rotations are assigned using a lottery system facilitated by the rotation assignment function called the "spin." Each academic year, the experiential office solicits rotation availability from our preceptors and this availability is entered into E*Value. Students then enter their rotation preferences into E*Value and the rotations are assigned in lottery number order. This keeps the process fair for all students. The rotation spin function will search for the student’s top site/preceptor choice first. While students are allowed to select preferences of sites, placement is not guaranteed.

The other main feature of E*Value is the student, preceptor, and site evaluation process. Students and preceptors are able to enter evaluations online and have them available for immediate viewing or reporting. Reporting feature is useful in assessment and quality improvement initiatives as well as reporting for accreditation.

Where possible, the Office of Pharmacy Practice Experience Programs will attempt to accommodate the requests of students to develop rotation opportunities for the student outside of our regularly scheduled rotations sites based on geographical and other student concerns. However, no implication of entitlement to preferential rotation development is to be implied by the willingness of the Director to attempt to accommodate such requests. Where it is not possible to accommodate special requests for sites out of the normal catalog of available rotations, students will be expected to accept and enthusiastically attend other, pre-established sites. While students making special requests may be asked to provide the names and contact information of institutions in which they are express interest, students are forbidden to contact individual preceptors at such potential sites regarding specific rotation opportunities or schedules, except when instructed to engage in such contact by the Assistant Dean of Experiential Education. Students engaging in such discussions will not be allowed to attend the site in question.

Electronic Communication

Students are required to maintain an active email account that is either your ONID account or OHSU account that is linked to your ONID account. If your ONID email is forwarded to a second address, please assure that the second address is active and capable of receiving email (e.g. it has not exceeded its maximum storage capacity). Students are responsible for all email communication delivered to student ONID email accounts through the course website.

Late or Missing Assignments/Examinations:

Students are required to complete all assignments and turn them in to the Assistant Dean of Experiential Education by the day and time stated in the Phar 760 Manual.

Notify the Assistant Dean of Experiential Education via email or phone if you are ill or have an emergency that will result in missing the due date for a class assignment. If at all possible this notification should occur before the assignment is due, but generally no later than 24 hours afterward. Work schedules, weddings, and travel plans are not acceptable reasons for missing an assignment. If you are participating in a student event sanctioned by the College that may affect your ability to complete an assignment, speak to the instructor well in advance about options for alternative due dates.

Students that do not notify faculty and gain approval for alternative due dates may have sanctions as follows; however, each instance will be considered on a case-by-case basis:”
Other Requirements:

Site Specific Requirements

Some sites require additional paperwork, proof of health insurance, and procedures such as background checks and drug testing. Student must agree to these requirements in order to be allowed to enter these sites. Due to the changing nature of these requirements and differences of the time frame in which these requirements are to be completed, the fees associated with these requirements are not included in the tuition. Instead, each student is responsible to pay for any associated cost.

Transportation

Transportation during rotation is the responsibility of the student. The process of matching students with rotation sites will assume that each student is able to arrange transportation i.e. car, bus, light rail system, car pool, etc.

Remuneration

Students are not allowed to accept any forms of compensation from the site / preceptor in exchange for their service during rotations.

Confidentiality

Confidentiality of patient and employee medical information is a legal and ethical right. The University Confidentiality policy prohibits any unauthorized or indiscriminate access, review or disclosure of patient or employee information. All medical and financial information contained in patient or employee charts is confidential. Medical information regarding a patient or employee should not be discussed with individuals not directly involved in their care.

Patient-specific discussions must not be conducted in public areas. All classroom discussions related to rotation site experiences will be limited to the sex, age and race of the patient as identifying information.

Patient-specific information and medical records, including information on computer screens, should not be left unattended in public areas. Violation of these policies, including unauthorized use, disclosure, alteration or destruction of patient or employee information or financial data will result in disciplinary action, up to and including dismissal from the rotation site and receive a non-passing grade in this course.

Closures or Curtailments (Including Inclement Weather):

- OSU: See OSU Campus Alert Website: [http://oregonstate.edu/main/alerts](http://oregonstate.edu/main/alerts)
- OHSU: Call the [OHSU Alert Line: 503 494-9021](http://oregonstate.edu/main/alerts) (option 3 for students)
- For students in clinical rotations, OSU or OHSU closure does not necessarily impact your clinical rotations. Contact your faculty of record for process.

Course Outline:

See Phar 760 Manual

Course Grading Standards:

Final course grades will be posted with the OSU registrar based on the official Grade Deadline Calendar [http://oregonstate.edu/registrar/grade-deadlines](http://oregonstate.edu/registrar/grade-deadlines).
The grading for the experiential courses is based on Pass/No Pass criteria and preceptors are primarily responsible for determining the student’s performance in a rotation. The College also provides required course specific assignments and evaluation forms for the rotations and is accessible online by using E*Value. Failure to complete all experiential hours and required activities will result in a grade of no pass (NP).

The College of Pharmacy policy for incomplete course grades is more restrictive than OSU policy. Incomplete grades must be resolved prior to the third week of the following term or a non-passing grade will be submitted.

**Evaluation and Improvement of Course Quality and Teaching Effectiveness:**

Course and faculty evaluations are an essential component of the College’s assessment activities as well as critical for the individual faculty evaluation processes. Student feedback is used to improve instructional and curriculum quality as well as provides a mechanism for students to bring other issues to light that occur in courses. Students have several opportunities to participate in continual quality improvement of courses and the program. Additionally, the College of Pharmacy Curriculum and Assessment committees have student representatives and students are encouraged to bring suggestions for improvement directly to members of these committees.

The College uses a two-prong end of term evaluation system: 1) Faculty Evaluation; and 2) Course Evaluation. The Faculty Evaluation consists of 12 items established by the Oregon State University Faculty Senate. The College cannot change those items and results are used to evaluate individual faculty members. Faculty evaluations open and close based on faculty teaching schedules. Responses to course and faculty evaluations are anonymous.

The second prong is a college-specific set of items that we have deemed to more helpful in evaluating courses. The process uses 5 standard items about the course such as organization and learning outcomes being understandable. The survey also asks you to indicate whether you believe the course outcomes were met. In general, course evaluations will be open 7 days prior to the end of the term and close 7 days after the official end of the term. Student will receive reminders during this window. The open-ended comments collected during the course evaluation are shared with the Course Coordinator, the Curriculum Committee, and the Director of Assessment & Faculty Development. These comments are not part of a faculty teaching evaluation.
General OSU and College of Pharmacy Policies:

Statement regarding Academic and Professional Standards

OSU Student Conduct & Community Standards (SCCS) are available online at http://studentlife.oregonstate.edu/studentconduct/offenses-0 and define expectations of students. The College of Pharmacy professional program has defined additional academic and behavioral expectations and characteristics considered essential to being a student pharmacist and pharmacist. Individuals who choose to become student pharmacists do so with the understanding that admission, progression and graduation are dependent upon their capacity to personally demonstrate essential characteristics defined by the College and profession of pharmacy, available at http://pharmacy.oregonstate.edu/current-student-resources.

To report a Conduct Incident please contact College of Pharmacy Student Services or use the “Report a Conduct Incident” on the SCCS page referenced above.

Statement regarding Students with Disabilities

Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval please contact DAS immediately at 541-737-4098 or at http://ds.oregonstate.edu. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.

Statement regarding Civility, Student Behavior and Non-discrimination

The goal of Oregon State University is to provide students with the knowledge, skill and wisdom they need to contribute to society. Our rules are formulated to guarantee each student’s freedom to learn and to protect the fundamental rights of others. Behaviors that are disruptive to teaching and learning will not be tolerated, and will be referred to the Student Conduct Program for disciplinary action.

Oregon State University prohibits discrimination on the basis of protected status in any of its policies, procedures, or practices. Protected statuses include age, color, disability, gender identity or expression, genetic information, marital status, national origin, race, religion, sex, sexual orientation, or veteran’s status. People must treat each other with dignity and respect in order for scholarship to thrive. Behaviors that create a hostile, offensive or intimidating environment based on any protected status will be referred to the Affirmative Action Office. For any questions regarding civility or acceptable behavior, please reference the University’s mission and values statements and the College of Pharmacy’s Essential Characteristics of a Student Pharmacist at http://pharmacy.oregonstate.edu/current-student-resources.

Statement regarding Religious Accommodation of Students

The University will grant students’ reasonable requests for religious accommodations where doing so does not conflict with reasonably necessary University goals. For more information, please consult the Religious Accommodation of Students Policy linked below or contact the Office of Equity and Inclusion: http://oregonstate.edu/oei/sites/default/files/religious_accommodations_for_student_policy_05_17_2012_v2.pdf
Copyright Information

Every reasonable effort has been made to protect the copyright requirements of materials used in this course. Class participants are warned not to copy, audio, or videotape in violation of copyright laws. Journal articles will be kept on reserve at the library or online for student access. Copyright law does allow for making one personal copy of each article from the original article. This limit also applies to electronic sources.

Syllabus Changes and Retention

This syllabus is not to be considered a contract between the student and the College of Pharmacy. It is recognized that changes may be made as the need arises. Students are responsible for keeping a copy of the course syllabus for their records.

Student Guidelines for Course Materials

To protect privacy rights, intellectual property rights, and the quality of the teaching and learning experience, the College of Pharmacy has adopted the following policies and guidelines governing course materials. Course materials include presentation materials created by instructors or other students, materials distributed in support of class activities, course assessments, and audio or video recordings.

- Except as provided below, students shall not give, sell, publish, or otherwise distribute any materials, in any medium, of any course given at the OSU College of Pharmacy, without the written consent of the course instructor and the Dean of the College of Pharmacy.
- Students currently enrolled in a course may, with the prior permission of the course instructor or guest lecturer, make audio or video recordings of course content, for use in study or other noncommercial purposes. If students intend to record photographs, video, or audio that includes other students, they must also obtain prior permission from the included students.
- Students currently enrolled in a course may distribute recordings to other currently enrolled OSU College of Pharmacy students for use in study or other noncommercial purposes arising from participation in the course, but they must ensure that recordings are distributed only in private forums. Any online distribution or posting of such recordings must be made on a password-protected site, such as the student Wiki.
- If granted permission to use recordings or content from faculty or student presentations (e.g. slides, figures, charts) in their own presentations, papers, or other scholarly activities, students must cite the source of those recordings or content appropriately.

Students should exercise special caution when creating or distributing audio, video, or image recordings of patients. Students must not create or distribute recordings of patients without securing the permission of everyone identifiable in the recording and their course instructor or preceptor.