

UCI School of Pharmacy and Pharmaceutical Sciences

Course Syllabus

Course Title	Introductory Pharmacy Practice Experience (IPPE) – Institutional
Course Number	PHMD 402
Credits	2 quarter credit (80 clock hours)
Term	Summer
Class Time	Varies

Course faculty		
	Contact Information	Office Hours & Location
Course Coordinator(s)		
Erin D. Knox, PharmD Director, Experiential Pharmacy Education	Phone: 949-824-2457 E-mail: edknox@uci.edu	Office: 101 Theory, Suite 100 Office Hours: [via Zoom] Wednesdays at 12p; Thursdays at 7a; in person by appointment
Sarah McBane, PharmD Associate Dean of Pharmacy Education	Phone: 949-824-8948 E-mail: smcbane@uci.edu	Office: 101 Theory, Suite 100 Office Hours: by appointment
Site Preceptor(s) per eValue assignment	E-mail: Contact via email provided through eValue assignment	Varies

Description

The Institutional (i.e., hospital or health system) IPPE is a required course scheduled as a concentrated, two-week block of eight-hour days, totaling 80 hours of direct experience at a practice site. The objectives of the Institutional IPPE rotation support the overall goal of providing the student early exposure to exemplary pharmacy practice within a hospital setting. Students will integrate and apply knowledge from the first year of didactic curriculum and participate in the provision of care to patients within a hospital system, under the direct supervision of a preceptor, who is a practicing, licensed pharmacist.

Documented completion and compliance with the following are required before beginning an IPPE experience:*

- a. Intern Pharmacist Licensure (valid in the state of California)
- b. Criminal Background Check
- c. Drug Screen
- d. Health Record-Immunizations (including annual TB and Influenza)
- e. Health Insurance Portability and Accountability Act (HIPAA) Training
- f. OSHA Blood borne Pathogens Training
- g. Basic Life Support (BLS) [Cardiopulmonary Resuscitation (CPR)] Certification
- h. APhA Immunization Certification (Certificate of Completion)

i. Other site-specific administrative requirements

*Some sites may have additional requirements for student pharmacists.

Learning Outcomes:

Program Learning Outcome (PLO)	Course Learning Outcome (CLO)	Assessment Strategy (Performance level*)
2.1, 2.2, 3.1, 3.3, 3.4, 3.5, 3.6	Obtain a complete “best possible” medication list from a patient, caregiver, or electronic health record, including medication allergies and reactions, all current medications (prescription, over the counter, herbal), dose, route, and frequency, and an assessment of adherence (i.e., last dose taken).	C1-3, E1-5
2.1, 2.2, 3.1, 3.3	Perform a comprehensive review of a patient’s medication list in order to: <ul style="list-style-type: none"> Assess completeness of medication orders including indication, dose, route, formulation, duration, and prn modifiers or hold parameters Identify opportunities for medication optimization or pharmacy protocol interventions (e.g., injectable to oral route change, formulary substitutions, renal dose adjustments) 	C1-3, E1-5
4.1-4.4	Model professionalism in all interactions with patients and members of the multidisciplinary team and identify the roles of a pharmacist within the health system.	E1-5
4.1-4.4	Actively participate in activities of the patient care team and support collaborative practice.	C1-3, E1-5
3.2-3.6, 4.1	Demonstrate effective communication skills (verbal, non-verbal, written) appropriate for interactions with patients and other healthcare providers in a multidisciplinary setting.	E1-5
2.2	Describe the medication inventory process within the health system, including placing and receiving orders, management of returns and recalls, expiration date tracking, and controlled substance oversight.	C1-3
3.6	Document activities or interventions in the electronic health record, as appropriate.	C1-3, E1-5
2.2-2.4	Use medication safety and risk concepts to evaluate causes of medication-related errors and describe processes to document and report errors, and report adverse drug reactions.	C1-3

2.3, 2.4, 3.2, 3.4, 3.6, 4.4	Retrieve and evaluate appropriate scientific literature to answer a drug information question promptly, accurately, and concisely.	C1-3, E1-5
4.3	Assist in completion of a quality improvement, cost-reduction, or drug-information project appropriate for the learning experience and duration.	C1-3
1.1, 2.1, 2.2	Review, evaluate, and accurately fulfill a medication order.	C1-3, E1-5
1.1, 2.2	Describe the system's distribution process, including automated dispensing cabinet management and medication delivery methods.	C1-3
1.1	Outline the steps to accurately prepare a sterile or non-sterile compounded product.	C1-3
1.1	Apply math principles to appropriate areas of pharmacy practice, such as drip rate calculations or medication reconstitution or preparation.	C1-3

Cognitive C1 = Remember
 C2 = Understand, Apply
 C3 = Analyze, Evaluate, Create (meta-cognitive)

Affective A1 = Receive
 A2 = Respond, Value
 A3 = Organize, Internalize

Psychomotor P1 = Perception, Set, Guided Response (imitation)
 P2 = Mechanism (intermediate proficiency)
 P3 = Complex overt, adaptation, origination

Entrustability E1 = Observe only, even with direct supervision
 E2 = Perform with direct, proactive supervision
 E3 = Perform with reactive supervision (i.e., on request and quickly available)
 E4 = Supervise at a distance and/or post hoc
 E5 = Supervise more junior colleagues

*Adapted from:

- Anderson, L. W. and Krathwohl, D. R., et al (Eds.) (2001) *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. Allyn & Bacon. Boston, MA (Pearson Education Group).
- Simpson, E.J. (1972). *The classification of educational objectives in the psychomotor domain*. Washington, DC: Gryphone House.
- Krathwohl, D.R., Bloom, B.S., Masia, B.B. (1973). *Taxonomy of Educational Objectives, the Classification of Educational Goals. Handbook II: Affective Domain*. New York: David McKay Co., Inc.
- Pittenger AL, Chapman SA, Frail CK, et al. Entrustable professional activities for pharmacy practice. *Am J Pharm Educ*. 2016;80(4):Article 57.

Course Schedule:

Each IPPE is scheduled as a 2-week concentrated block within any of the 6 timeframes that occur during summer session. Students are assigned placement by a computer-generated optimization and randomization program embedded in eValue (experiential software).

Week	Date / Time	Topics	Assignments/ Readings*	Lecturer(s)
1		<p>Students on institutional IPPE rotation may, under the supervision of a licensed pharmacist, participate in pharmacy processes including any or all of the following:</p>		
2	TBD	<ul style="list-style-type: none"> a) Obtain thorough patient medication list that includes all medications, supplements, herbals, and implantable/injectable formulations, listing dose, route, strength, frequency and modifier (e.g., prn indication), documenting this information in the medical record and contacting prescriber for follow up as needed. b) Review patient medication profiles for completeness, including identifying therapeutic duplications and developing recommendations for patient-specific dose adjustments. c) Participate in multidisciplinary rounds as a representative of the pharmacy team. d) Answer a medication information question using primary literature and published guidelines, delivering the information in an appropriate format to a healthcare professional or patient. e) Review a medication order for completeness and retrieve appropriate medication from pharmacy stock for delivery and administration. f) Prepare sterile or non-sterile medication formulations. g) Participate in pharmacy inventory oversight, including receipt of deliveries, removal of expired or deteriorated products, and management of stock in automated dispensing systems. 	<ul style="list-style-type: none"> ▪ Soric, M. M. (Ed.). (2013). Maximize Your Rotations: ASHP's Student Guide to IPPEs, APPEs, and Beyond. ASHP. ▪ Joint Commission of Pharmacy Practitioners. (2014). Pharmacists' patient care process. <p>Students will have access to electronic and/or print drug information resources, either through site-specific access or through the UC Irvine library system.</p>	Preceptor on site

*Subject to change

Course Instructional Strategies:

This course will utilize principles and norms of adult learning to facilitate achievement of learning outcomes. Instructional strategies may include, but are not limited to, performance-based assignments, active learning techniques, assigned readings, case studies and discussions, in-services and oral presentations, formative feedback, group discussions, practically applied skills in an authentic setting, and/or reflections. Students are encouraged to ask questions of each other and the preceptor during the course.

Students are expected to demonstrate professionalism and abide by all facility guidelines and rules for presence in patient care and pharmacy areas. Students shall abide by dress codes and will wear a short white coat and display school or hospital identification badge, unless instructed otherwise. Students are prohibited from taking photographs, videos, recordings, or copies of documents (including, but not limited to HIPAA protected information) without express written and/or verbal permission from legal, risk, and all parties directly or indirectly related to the activity.

Dear Dr. Pharmacist,

My name is Petra Anteater and I am a PY1 assigned to your site for institutional IPPE starting June 1. Currently I am employed as a pharmacy intern at Zot Pharmacy and have experience volunteering at Irvine Hospital in the ICU. My goals for this IPPE are to gain a better understanding of medication distribution, learn the processes for controlled substance monitoring in the health system, and increase my exposure to pharmacists in unique roles within the hospital system. I have a strong interest in pain management and palliative care with long-term goals of completing a residency. Attached is my updated CV for your reference. Please let me know if there is any additional information you would like me to send, I look forward to beginning IPPE next month!

Sincerely,
Petra Anteater, PY1

Once placement is finalized, the student shall email the preceptor at least 2 weeks before the first day of rotation. This email should serve as an introduction, providing background on the student's pharmacy work experience and listing three goals the student seeks to accomplish. An example letter can be found above.

Students may be asked to complete a reflection on their work during the IPPE rotation. This may or may not be required, but may be useful for feedback to preceptors and to guide future rotations. Preceptors may contact the UCI Office of Experiential Education for suggestions on reflections, if desired.

Preceptor Responsibilities and Expectations

Preceptors will be responsible for arranging or providing student orientation on day 1 of IPPE, which may vary from a brief meeting with the preceptor to a full, structured orientation.

Preceptors should review processes surrounding badging/identification, parking, schedule, expectations, goals of IPPE, methods and schedule for feedback, health record access, absence protocol, and relevant policies and procedures at the site.

Preceptors:

- a) retain ultimate control and responsibility for supervision of patient care
- b) provide students experiences and observational opportunities of educational value
- c) offer verbal and/or written feedback on performance to students at midpoint and conclusion of an IPPE
- d) will immediately contact UCI Office of Experiential Education if the student is performing at a level below the minimum requirements for this IPPE
- e) permit the use of its parking facilities and cafeteria facilities for all students assigned, as available, although a fee may be required
- f) may, upon request, require that any student returning from an absence caused by illness or injury be cleared by a physician
- g) assure that staff is adequate in number and quality to provide safe and continuous health care for patients while maintaining state mandated pharmacist to intern ratios.

Required/Suggested Readings, Tutorials, and Materials:

There are no required readings for this course.

Recommended Readings:

- Soric, M. M. (Ed.). (2013). Maximize Your Rotations: ASHP's Student Guide to IPPEs, APPEs, and Beyond. ASHP.
- Joint Commission of Pharmacy Practitioners. (2014). Pharmacists' patient care process.

Students will have access to electronic and/or print drug information resources, either through site-specific access or through the UC Irvine library system.

Required Equipment and Materials (to be provided by student unless otherwise stated):

- a) Approved short white coat, Scientific calculator if needed, site-approved identification or UCI student badge.

Library Resources:

Library resources may be accessed here: <https://www.lib.uci.edu/>

Grading and Evaluation:

Course grades will be determined as follows:

Midpoint assessment and final assessment to be completed via electronic evaluation system

- Preceptors shall provide feedback to students at set points during each rotation.
- Preceptors are required to document final feedback via electronic evaluation system within 72 hours of IPPE completion.
- Students are expected to complete final site and preceptor evaluations within 24 hours of IPPE completion.

1. School of Pharmacy Grading Scale

% Score	Grade
≥70	Pass
<70	Fail

Score is determined by preceptor of record based on student's progress and ability to perform activities described in course objectives. Preceptor-submitted grades will be reviewed and approved by Director of Experiential Education.

Final percentages ending in the decimal 0.50 or higher will be rounded up. Numbers ending in 0.49 or lower will be rounded down. There will be no exceptions to this policy.

START program and Remediation:

Students are encouraged to contact the course coordinator and individual instructors as early as possible when further clarity on course content is needed or difficulties in course performance are being experienced. Course coordinator(s) may also refer students to the Associate Dean of Pharmacy Student Affairs, as needed to create an individualized action plan. In the case that a student fails the course, the student should refer to the section on Reassessment and Remediation in the PharmD Student Handbook. In addition to what is stated in the Reassessment and Remediation section in the PharmD Student Handbook, students will be evaluated at the midpoint of each IPPE, i.e., upon completion of the first week on-site. Preceptors should immediately contact the Office of Experiential Education if a student is determined to be performing at a level below the passing score for this IPPE.

University, School, and Course Policies:

Attendance:

Students are required to report to placement site for a minimum of 80 hours over the assigned IPPE timeframe. Preceptors may require student to make up any time missed (due to holidays or illness) during off-hours or on weekends. Prior to day 1, preceptors will provide students expected days and hours of attendance.

Late Assignments:

Assignments are determined by primary preceptors, who will be responsible for communicating expectations, grading, and process for missed work.

Examination Policies:

Refer to the UCI SPPS Exam Day Guidelines for exam day expectations and procedures. Exams will not be administered as a routine requirement of this course, however preceptors may employ various methods for evaluating student knowledge.

Student Accommodations:

University of California, Irvine is committed to providing a barrier free environment for persons with documented disabilities. If you have a disability and feel you need accommodations in this course, please contact the Disability Services Center, located in Building 313, or apply for services online at www.dsc.uci.edu. DSC approved accommodations will be provided for students who present a Faculty Notification Letter from the DSC.

Academic Integrity:

Learning, research, and scholarship depend upon an environment of academic integrity and honesty. This environment can be maintained only when all participants recognize the importance of upholding the highest ethical standards. All student work, including quizzes, exams, reports, and papers must be the work of the individual receiving credit. Academic dishonesty includes, for example, cheating on examinations or any assignment, plagiarism of any kind (including improper citation of sources), having someone else take an examination or complete an assignment for you (or doing this for someone else), or any activity in which you represent someone else's work as your own. Violations of academic integrity will be referred to the Office of Pharmacy Student Affairs. **Academic dishonesty will not be tolerated in this course.** If it is discovered that a student has engaged in academic dishonesty, they will not receive credit for the assignment or examination in question. Please refer to the SPPS Student Handbook and speak to the course directors if you have any questions about what is and is not allowed in this course.

Professionalism: **Code of Conduct**

At the University of California, Irvine, we are committed to:

- **Integrity** - We will conduct ourselves with integrity in our dealings with and on behalf of the University.
- **Excellence** - We will conscientiously strive for excellence in our work.
- **Accountability** - We will be accountable as individuals and as members of this community for our ethical conduct and for compliance with applicable laws and University policies and directives.
- **Respect** - We will respect the rights and dignity of others.

All participants are bound by the [University of California Standards of Ethical Conduct](#). Students are expected to conduct themselves in a professional manner at all times and are required to adhere to policies described in the School of Pharmacy & Pharmaceutical Sciences student handbook.

Professional Attire:

Students are expected to follow facility or site-specific dress codes. If a dress code is not specified by the site, business casual attire is suggested and the UCI Health dress code policy should be followed.

<https://www.ucihealthnursing.org/docs/nursing-schools/dress-code-policy.pdf>

Copyright:

Faculty, staff, and students of the University of California use materials created by others for teaching, learning, research, or public service. The University encourages the appropriate use of such materials within the scope of copyright law. Students are required to follow copyright laws and are encouraged to review the copyright and fair use guidelines available on the [University's copyright website](#) (<https://copyright.universityofcalifornia.edu/index.html>), among other resources, and to contact their campus librarians if further advice is needed.

Selling, preparing, or distributing for any commercial purpose course lecture notes or video or audio recordings of any course unless authorized by the University in advance and explicitly permitted by the course instructor in writing, is strictly prohibited. The unauthorized sale or commercial distribution of course notes or recordings by a student is a violation of these Policies whether or not it was the student or someone else who prepared the notes or recordings.

Equity & Diversity Statement:

For more than a decade, UCI has taken a university-wide approach to equity, diversity and inclusion. Led by the Office of Inclusive Excellence serves the campus priorities and is committed to a transformative, whole university effort grounded in our values: expect equity, support diversity, practice inclusion and honor free speech. For more information on our commitment to diversity, visit <https://inclusion.uci.edu> and <https://pharmsci.uci.edu/pharm-d/>.

In accordance with these values, we strive to create a learning environment that serves all students and is enhanced by the diverse backgrounds and perspectives within our school community. The materials presented in this course and discussions that take place during class shall be respectful of diversity: ethnicity, race, age, gender and gender identity, sexuality, religion, disability, socioeconomic status, and culture. Members of this class are encouraged to participate actively during class meetings and contribute their ideas and opinions. Students and faculty must help create a safe, inclusive environment by demonstrating respect for every other person. We encourage you to share your suggestions. Additionally, we urge you to engage in open dialogue with faculty members or program administrators and report any experiences of unfair or hostile treatment. The following resources are available to students: The UCI Office of Inclusive Excellence (<https://inclusion.uci.edu>), UCI School of Pharmacy & Pharmaceutical Sciences Office of Student Affairs.