



UC San Diego
SKAGGS SCHOOL OF PHARMACY
AND PHARMACEUTICAL SCIENCES

Hospital / Health-System Advanced Pharmacy Practice Experience

SPPS 403

Office of Experiential Education

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I. Course Description: SPPS 403 (7 units)

The University of California San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences and the UC San Diego Health System and affiliated health systems offer fourth year pharmacy students a required hospital / health-system experience that provides opportunities to apply their acquired knowledge and skills to the range of professional services and activities expected in a hospital of integrated pharmaceutical services. Through observation and practice, students will develop and explore their roles in the various pharmaceutical operational initiatives that support the clinical services designed to care for the patient. The student will learn the functions of various personnel (i.e. hospital pharmacy technicians and pharmacists) which may include experiencing the roles of pharmacists in central distribution, decentralized clinical services, transitions of care activities, investigational drug services, pharmacy administration, and more. Additionally, the student will learn and work with different technologies in pharmacy practice, such as order entry and verification, automated dispensing cabinets, high density storage devices, barcode medication identification technology, and the electronic healthcare record. Students will gain experience in the preparation of parenteral medications, drug distribution, practice management-related activities as well as decision-making and drug information activities. Through this hands-on experiential rotation, an individual will progress from the student pharmacist level to being accountable for pharmacist-delivered, patient-centered care. Finally, in working with many different levels of personnel throughout the rotation, the student will understand the importance of relationship development, effective communication, and networking.

Students should refer to the Experiential Education website for additional information: <http://pharmacy.ucsd.edu/faculty/experiential.shtml>. Students are expected to adhere to all Policies and Guidelines at SSPPS (<http://pharmacy.ucsd.edu/current/policies.shtml>.)

II. Prerequisites

- A. Students must have successfully completed years 1-3.
- B. Students must meet eligibility requirements to progress to APPEs per SSPPS Progression Policy Students must meet expectations as stated in the SSPPS Guidelines on the Evaluation of Professionalism.
- C. Students must have successfully completed all Introductory Pharmacy Practice Experience (IPPE) requirements.
- D. Students must have received a passing score on the Comprehensive Cumulative exam.
- E. Students must have a pharmacy intern license.
- F. Students must have up-to-date immunization records and have received HIPAA training.
- G. Students must have requisite training/certifications necessary for the given activity.

III. Course Goals

Students will interact with a number of different healthcare providers and participate in a variety of patient-centered care activities within the hospital / health-system environment. The student will be provided with many opportunities to apply academic basic science and clinical didactic course work in this setting.

IV. Course Objectives

- A. Students will be able to understand the hospital /health-system pharmacy operations that support clinical services. These operations include but are not limited to:

1. Pharmacy computer systems
 2. Order entry and verification
 3. Automated dispensing systems
 4. Controlled substances monitoring systems
 5. Quality assurance processes
 6. Aseptic technique monitoring systems
 7. Discharge medication processes
- B. Students will be able to demonstrate a commitment to and a valuing of patient safety by assuring prescription verification, accurate preparation, labeling, dispensing and distribution of prescriptions and medication orders.
- C. Students will be able to demonstrate knowledge of and accept responsibility for that knowledge of commonly used medications, formulations and drug products.
- D. Students will be able to demonstrate knowledge of and comply with all federal, state, and local laws related to pharmacy practice. Students will demonstrate ethical and professional behavior in all practice activities.
- E. Students will demonstrate ethical and professional behavior in all practice activities.
- F. Students will be able to demonstrate effective communication abilities in interactions with patients, their families and care givers, and other health care providers.

V. Activities

- A. Students will be expected to participate in hospital / health-system activities, as assigned by the preceptor or other healthcare professionals that are deemed appropriate to achieve basic pharmacist-delivered hospital practice and patient-centered care competencies. Activities may include, but are not limited to, the following:
1. Reviewing physician orders and verify prescription orders under preceptor direction
 2. identifying and reporting medication errors and adverse drug reactions
 3. providing patient education to a diverse patient population
 4. retrieving, evaluating, managing, and using clinical and scientific publications in the decision-making process
 5. accessing, evaluating, and applying information to promote optimal health care
 6. ensuring continuity of pharmaceutical care among health care settings
 7. participating in discussions and assignments regarding compliance with accreditation, legal, regulatory/legislative, and safety requirements
 8. participating in discussions and assignments regarding the drug approval process and the role of key organizations in public safety and standards setting
 9. participating in discussions and assignments concerning key health care policy matters that may affect pharmacy
 10. working with the technology used in pharmacy practice
 11. preparing and dispensing medications
 12. compounding parenteral and non-parenteral drug products using accurate calculations, pharmaceutical components, and techniques

13. apply legal and regulatory principles to medication distribution, use and management systems
 14. managing systems for storage, preparation, and dispensing of medications
 15. participating in purchasing activities
 16. managing the medication use system and applying the systems approach to medication safety
 17. participating in the pharmacy's quality improvement program
 18. participating in discussions and assignments of human resources management, medication resources management, and pharmacy data management systems, including pharmacy workload and financial performance
 19. participating in the pharmacy's planning process
 20. participating in the health system's formulary process
- B. Students will participate in department of pharmacy educational activities as assigned by preceptors. As scheduled, students will attend and participate in a student conference.

VI. Student Conference

- A. The goals of the Student Conference are:
1. To provide the student a forum for didactic discussions of key hospital / health-system related topics.
 2. To provide an opportunity for the student to present a hospital / health-system topic in a conference setting.
 3. To provide the student with an evaluation of his/her presentation based on the criteria listed.
- B. The student will present a current hospital / health-system related topic (ie. automation in the work place, alert fatigue with pharmacy computer systems, transitions of care processes, etc...) as assigned by the preceptor. Assignments may be in various formats, including but not limited to:
1. PowerPoint presentation/handout
 2. Patient educational materials
 3. Monograph
 4. Algorithms
 5. Policies and Guidelines
 6. Newsletters
- C. Students should present the topic in a manner so as to stimulate group participation.

VII. Evaluations

- A. Grading will be Pass/No Pass
- B. Three evaluations using the standardized Pharmacy Evaluation Form are required for this course:
1. Mid-point Formative Evaluation: An online self-evaluation completed by the student and discussed with the preceptor. The preceptor will provide written and verbal comments and sign off.

2. Preceptor & Site Evaluation: An online evaluation completed by the student at the end of the rotation.
 3. Summative Evaluation: An online evaluation completed by the preceptor at the end of the rotation and discussed with the student.
 4. Students may be evaluated at any other time at the discretion of the preceptor. Preceptors may evaluate students more frequently, so that the student is informed of areas requiring improvement early in the rotation. The primary preceptor may obtain feedback from all team members as well as any patient comments.
- C. Students must have submitted a completed Midpoint Formative evaluations in addition to evaluations of their sites/preceptors in order to receive their grades.
- D. For a summative evaluation, a student has to average at least a “three” on a scale of “one to five” overall in order to successfully pass an APPE rotation. Less than “three” for the summative evaluation is considered a failure for that experience.

VIII. References

- A. SPPS References (<http://pharmacy.ucsd.edu/faculty/experiential.shtml>)
1. Goals and Essential Elements for Monitoring Drug Therapy
 2. How to Present A Patient for Pharmacy Rounds
- B. Textbooks
1. Mager R. Preparing Instructional Objectives, 3rd Edition. Belmont, CA: Fearon Publishers, 1984. *[Updated version may be available]*
 2. Trissel LA. Handbook on Injectable Drugs, 17th Edition. American Society of Health System Pharmacists. 2012. *[Updated version may be available]*
 3. Alldredge, BK, Corelli RL, Ernst ME, Guglielmo BJ, Jacobson PA, Kradjan WA, Williams BR. *Koda-Kimble & Young's Applied Therapeutics: The Clinical Use of Drugs*, 10th ed., Lippincott Williams & Wilkins, 2012. *[Updated version may be available]*
 4. Medical dictionary. Examples: Stedman's Medical Dictionary, Dorland's Medical Dictionary.
 5. DiPiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG, Posey LM, eds. *Pharmacotherapy: A Pathophysiologic Approach*, 8th edition. McGraw-Hill, New York, 2011. *[Updated version may be available]*
- C. As specified per individual rotation site/preceptor.