COURSE TITLE: Infectious Diseases PHAR 9981

Preceptor: 
Experiential Site: 
Current semester/year: 
Office: 
Office Phone: 
Email: 
Course Prerequisites: Fourth Year Status
Required/Elective Elective
Credit hours: 6

Description:

The Infectious Diseases Rotation is designed to introduce the student to all aspects of infectious diseases. They will develop a basic understanding of clinical microbiology, the utilization and spectrum of activity of antibiotics, pharmacokinetic and pharmacodynamics properties and adverse effects of antibiotics. The student will learn a systematic approach on the evaluation of each patient so that they will have an understanding of pathophysiology, presentation, diagnosis and treatment of the disease states that are covered. The student will attend infectious diseases rounds and is expected to become an active member of the team. The student will learn to effectively communicate with other healthcare professionals and patients so that they can discuss and defend their recommendations using evidence-based, patient-specific data. Ultimately the student will be expected to integrate disease state knowledge, patient-specific data, knowledge of antibiotics to assure optimal healthcare to their patients.

Orientation

Preceptors Responsibilities:
1. Orientation to the rotation at the beginning of the APPE
   a. Required objectives, activities and expectations
   b. Starting and ending times
   c. Policies and procedures
   d. HIPAA compliance
   e. Introduction to appropriate health care professionals and staff
   f. Tour of the facility
2. Assign student to responsibilities consistent with the rotation objectives.
3. Provide supervision of the student’s activities and monitor achievement of required tasks to assess related student competencies
4. Have those qualities which foster a positive professional role model.
5. Possess appropriate communications skills and have the ability to facilitate learning.
6. Supervise all written and verbal recommendations made by the student.
7. Never assume a student’s competency, but determine it by reviewing their work profile, discussion and experience.
8. Provide the student with mid-point performance evaluation during 3rd week.
   a. Specific recommendations for improvement if needed.
   b. Any failing mid-point evaluation should be reported to the Experiential Director.
10. Communicate with Experiential Director regarding any significant irregularities in student behavior:
    a. Irregular attendance
    b. Unprofessional appearance
    c. Violation of facility policies
    d. Unprofessional behavior or inappropriate communications with health professionals, patients, customers or staff

**Student Responsibilities:**
1. Contact preceptors, 2 weeks in advance, to coordinate first day arrival plans
2. Maintain a high standard of professional behavior:
   a. Appropriate attire and appearance for the professional setting.
   b. Effective verbal and written communications.
   c. Compliance with all site policies and procedures.
   d. Consistent and punctual attendance.
   e. Use of cell phones or other electronic devices is prohibited except with the express permission of the preceptor.
3. Since the primary objective of the rotation is learning, the student needs to be proactive, not passive.
   a. This requires active participation and communication.
4. Maintain patient confidentiality in compliance with HIPAA regulations.
   a. All information concerning patients/customers and patient care is to remain confidential. Any documents or notes with patient-related information should be shredded at the end of the rotation.
5. Actively participate in the professional and technical functions of the site, relative to the rotation objectives.
6. Develop and revise professional and personal goals for each rotation according to the objectives of the particular clerkship.
   a. Professional and personal goals should be within the scope of the rotation.
7. Satisfy the rotation attendance requirements (240 hours) within the rotation time period.
8. Complete the rotation and preceptor evaluation forms.
9. The student’s rotation schedule is at the discretion of the preceptor.
   a. This may be nights, weekends, holidays, etc.
10. Must conduct themselves in a professional manner at all times.
    a. Unprofessional actions could cause removal from the rotation site and failure of the rotation.
11. Must inform preceptor in advance of any expected absence or tardiness
Objectives (Student Expectations):

- Students will collect and organize all patient-specific information needed to prevent, detect, and resolve antibiotic-related problems and to make appropriate evidence-based, patient-centered antibiotic therapy recommendations to their preceptor and as part of the interdisciplinary team.
- Demonstrate the appropriate use and interpretation of data from an electronic or hard bound patient chart or medical records.
- The student will be available for patient counseling and to answer any questions the patients may have.
- The student will develop an in-depth understanding of the interpretations of laboratory values.
- Students will design a treatment regime that includes appropriate antibiotics, length of treatment, and surgical or other interventions necessary to treat the infection. Be able to discuss evidence-based and patient-specific reasoning behind your recommendations.
- The student will have a basic understanding of the use of diagnostic imaging to support the diagnosis of certain infections.
- Interpret a culture and sensitivity report.
- Basic understanding of common types of antibiotic resistance
- Demonstrate an understanding of the antibiotics that are commonly used to treat hospital acquired and community acquired infections including:
  - Spectrum of activity and their application in the treatment infections.
  - Dosing
  - Adverse effects
  - Application of pharmacokinetics and pharmacodynamics.
- Students will be evaluated on appearance, professional attitude, punctuality and independent learning.

Course Outline:

Each infectious diseases site and preceptor has the option of requiring additional site specific topics. Each site may not cover all of the following infections based upon discretion of the preceptor.

Understand the pathophysiology, presentation, diagnosis, and pathogens that cause the following infections and the treatment approach antibiotics and other interventional necessities to these infections. Expectations of the Students: This will vary at each site, therefore, refer to each site.

A. Community-acquired, hospital-acquired and ventilator-associated pneumonia.
B. Skin and soft tissue infections
   - Cellulitis, dog and cat bite, closed fist, and necrotizing soft-tissue infections
   - Diabetic foot infections, osteomyelitis, septic joint and orthopedic device infections.
C. Intra-abdominal infections including primary, secondary and tertiary peritonitis and *Clostridium difficile* diarrhea.
D. Bacteremia
E. Urinary-tract infections
F. Central nervous system infection including bacterial meningitis and herpes encephalitis
G. Febrile neutropenic patient
H. New fever in intensive care
I. Endocarditis.
J. Drug fever
K. Common outpatient infections including otitis media, sinusitis, pharyngitis, acute exacerbation of chronic bronchitis and acute bronchitis.

**Mid-Point Performance Evaluation:**
Preceptors must provide the student with a mid-point performance evaluation during the 3rd week of the six week rotation. Preceptors will provide specific recommendations for areas of improvement if necessary. Preceptors should report any student failing the mid-point evaluation to the Director of Experiential Education.

**Absence Policy:**
Mandatory attendance is required for all Advanced Pharmacy Practice Experiences (APPEs). Each APPE consist of six weeks and each week consist of 40 hours at the designated experience for a total of 240 hours. Students are required to be at the practice facility in accordance with the schedule for each particular site, including nights and weekends.
Absences may be excused in the event of unforeseen emergencies, unusual circumstances, illnesses, or severe weather. Any foreseeable absences must be pre-approved by the principal preceptor. All absences are expected to be made up as directed by the preceptor.
Continual unexcused absences or tardiness are grounds for failure of the rotation.
The only designated holiday during the year is during the Christmas break.

**Confidentiality:**
Pharmacy students must be in compliance with the Health Information Portability and Accountability Act (HIPAA). The Office for Civil Rights enforces the HIPPA Privacy Rule, which protects the privacy of individually identifiable health information; the HIPPA Security Rule, which sets national standards for the security of electronic protected health information; and the confidentiality provisions of the Patient Safety Rule, which protect identifiable information being used to analyze patient safety events and improve patient safety (US Department of Health & Human Services, HSS.gov).
All patient information, names, medical records, social security numbers, date of birth, and other identifiers will not be used, removed, or discussed for any reason outside the facility. Any breach of HIPPA will be grounds for removal from the facility and failure of the rotation. See Student Handbook under HIPPA.
The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) is a Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education.
**Academic Dishonesty/Professionalism:**
Consistent with University regulations, academic dishonesty will not be tolerated. Students found guilty of infractions will be removed from the course. Likewise, consumption of alcohol or other substances of abuse during the experiential component will be grounds for dismissal. Any student asked to leave an APPE site for any reason will fail the rotation and be called before the Progressions Committee.

**Students With Disabilities:**
The Americans with disabilities Act (ADA) is the civil rights guarantee for persons with disabilities in the United States. It provides protection for individuals from discrimination on the basis of disability. Idaho State University, in the spirit and letter of the law, will make every effort to make reasonable accommodations, according to section 504 of the Rehabilitation Act of 1973 and the ADA. Students with disability related needs should contact the Director of the Center for Students with Disabilities, Campus Box 8118, 208-282-3599. TTY 1-800-377-3529. In addition the student must supply copies of official correspondence from the Center for Students with Disabilities to the Associate Dean of the College of Pharmacy. Arrangements will then be made to notify individual module directors of the student’s special needs.

**Assessment:**
The College has an ongoing assessment program. A requirement for accreditation, the program is designed to assure curricular effectiveness. The assessment program at the College of Pharmacy employs a variety of measures from students, faculty, and preceptors. Throughout the curriculum, students participate in assessments that are embedded as required components of courses and practice experiences. Participation in these assessment activities is required. Assessment is a required component of all pharmacy courses.

**Compensation Prohibited:**
Pharmacy students, while participating in any experiential activities to satisfy required hours stated in the College curriculum, shall not, under any circumstances, receive financial remuneration or compensation for hours obtained from experiential sites. Any hours in which the student is paid will not count toward fulfillment of the experiential experience.

**Grounds for APPE Failure:**
Students will be dismissed from the APPE for any of the following:

1. Poor performance in clinic
2. Unprofessionalism
3. Inappropriate behavior
4. Failure to complete all written and oral assignments satisfactorily
5. Violation of patient confidentiality
6. Informing a patient to change or discontinue a drug without consulting provider
7. Providing inappropriate information to patients, providers, or other staff (including guessing or agreeing with irrational pharmacotherapy)
8. Lack of active participation
9. Academic/professional dishonesty
10. Plagiarism
11. Lack of attendance
12. Consumption of alcohol or other substances of abuse
13. Any failure to comply with HIPPA
### Competencies

**Based on College of Pharmacy Endpoint Competencies 2010**

#### Ensure Appropriate Pharmacotherapy and Health Outcomes

1. Collect relevant information from a medical record and organize it into a usable format.
2. Efficiently gather relevant data from a patient interview.
3. Perform basic aspects of physical assessment.
4. Accurately assess the patient’s/caregiver’s self-management skills (i.e., medication adherence and/or ability to correctly use their drug regimen or device). Recognize the patient’s/caregiver’s level of health literacy.
5. Identify patients at risk for adverse drug reactions.
6. Accurately and efficiently identify all drug-related issues.
8. Evaluate all rational therapeutic options.
9. Determine the best pharmaceutical care plan for patients, including use of sound clinical judgment when data are incomplete.
10. Articulate and justify patient-specific recommendations.
11. Apply pharmacokinetic and/or pharmacodynamic principles and patient data to determine the most appropriate dosing regimen and/or drug delivery system for the patient.
12. Appropriately utilize clinical literature to provide an evidence-based approach to patient-centered pharmaceutical care.
13. Identify patient-specific monitoring parameters for all drug therapies.
15. Provide accurate and useful drug information by defining the needs of the requestor, evaluating information using all appropriate resources, and effectively communicating a response.
16. Recognize health care disparities and assure that individual members of a patient population receive appropriate pharmaceutical care services.
17. Retain previously covered information and demonstrate level-appropriate knowledge base.

#### Dispense Medications and Devices

18. Provide counseling to patients and/or caregivers including proper instructions for the safe and effective use of medications and devices.

#### Manage Health Systems

19. Contribute to the pharmaceutical care system’s process for reporting and managing medication errors and adverse drug reactions.

#### Promote Health and Disease Prevention

20. Identify and provide effective health promotion and disease prevention services including educating patients about behaviors that promote health, maintain wellness, prevent and control disease.

#### Display Professionalism

21. Accept responsibility for individual patient outcomes and give priority to patient well-being and safety even if it means making personal sacrifices.
22. Communicate and interact in a professional and culturally sensitive manner including demonstrating respect and sensitivity for others, being open-minded and nondiscriminatory, and maintaining patient confidentiality.
23. Demonstrate professional behavior including, but not limited to, punctuality, reliability, meeting deadlines, dressing appropriately, and assuming responsibility for one’s actions.
24. Participate actively and effectively in educational activities and as a member of an interdisciplinary health care team.
25. Maintain high standards with regard to moral, ethical and legal conduct.
26. Demonstrate a commitment to professional growth and life-long learning including the ability to self-assess, accept and utilize feedback, and learn independently.