

**SYLLABUS**  
**Clinical Immunology**  
**PHAR 511**  
**Fall 2014**

School of Pharmacy

This syllabus is not to be construed as a contract with the student and is subject to change.

The School of Pharmacy reserves the right to change the course syllabus. *The School should notify the students through the course notification system or by an email preferably through the Blackboard system*

*Materials used within this course may be copyrighted and should not be shared with individuals not enrolled in this course.*

Course meeting days and time	Thursdays 8:00 am to 12 noon
Location	L04
Team Leader / Instructor	Stephanie Anderson, Pharm.D.
Office	151
Phone	304-696-7397
Email	andersons@marshall.edu
Office hours	Wednesdays 1-2 pm or by appointment

**Students: If the instructor accepts appointments, then please email the instructor for availability. The student can expect the instructor to respond to E-mails and phone messages within 72 hours.**

**Course Description:** Skill development in vaccine administration, patient counseling, and maintaining appropriate record management. The student will acquire knowledge regarding individual vaccines and the vaccination process. This knowledge will be reinforced through laboratory and simulation activities. Skill development will culminate with the student providing immunizations in patient settings.

**Prerequisites:** *P-1 Status and CPR*

**Text Books:**

**Required:**

- American Pharmacists Association. A National Certificate Program for Pharmacists. 13th Ed. 2014: APhA (provided by course).
- A TurningTechnologies Response Card RF LCD device (P/N RCXR-02) for in-class polling incorporated into PowerPoint presentations

**Recommended:** *Not applicable*

## Course Objectives:

Number	Objective	Linkage to MUSOP Abilities (list ability numbers)	How Assessed
1	Explain how to establish/maintain a pharmacy-based immunization delivery program.	43, 69	Quiz, ALE. exam
2	Determine appropriate vaccines needed for a given patient scenario.	1, 2, 7, 10, 51,67	Quiz, ALE, exam, OSCE
3	Describe the signs and symptoms of an immunization adverse reaction and the proper emergency procedure or care that should be given.	2	Exam
4	Explain how to appropriately administer an intranasal live attenuated influenza vaccine.	4	ALE, exam
5	Demonstrate the proper steps to immunize an adult patient (includes intramuscular and subcutaneous injection technique, pre and post counseling, and completion of appropriate record keeping).	1, 4, 48, 57, 63, 65, 66, 67	APhA skills check-off, OSCE

**Pre-work for each class meeting will be posted at least 48 hours prior to the class session. The pre-work may consist of Camtasia recordings, readings, or other various activities. Students are expected to complete the pre-work assignments before class. Class sessions may consist of lectures, active learning events, or mini-assessments.**

## Schedule of Activities:

Date	Meeting Format/Time	Meeting Topic	Course Student Learning Outcomes (Corresponding Course Objective)	Instructor
8/28/14	Studio Class 8 am- 12 noon	<ul style="list-style-type: none"> <li>• Vaccines and immune responses</li> <li>• Key points for each vaccine and disease state</li> <li>• State laws and regulations</li> <li>• Work flow issues, vaccine storage, compensation</li> <li>• Staying up to date</li> <li>• Immunization Schedules</li> <li>• Drug Monographs</li> <li>• Syringes, needles, and vials 101</li> </ul>	<ol style="list-style-type: none"> <li>1. Describe how vaccines elicit an immune response and provide immunity. (2)</li> <li>2. Describe characteristics and appropriate use of vaccines available in the U.S. market (2)</li> <li>3. Identify available vaccines as live attenuated or inactivated. (2)</li> <li>4. Discuss legal, regulatory, and liability issues with pharmacy-based immunizations programs. (1)</li> <li>5. Determine work flow considerations (1)</li> <li>6. Discuss principles and procedures for vaccine storage and handling. (1)</li> <li>7. Discuss various means for vaccine reimbursement (1)</li> <li>8. Evaluate patient histories and make specific recommendations based on the appropriate immunization schedule (2)</li> <li>9. Utilize a drug monograph to determine pertinent information needed for given vaccine (2, 5)</li> <li>10. Discuss unwanted characteristics of a vial/ampule and its contents. (1)</li> <li>11. Describe how to date a multi-dose vial. (1)</li> <li>12. Interpret expiration dates. (1)</li> <li>13. Accurately prepare and measure a vaccine dose with a given syringe using aseptic technique. (5)</li> </ol>	Dr. Anderson
9/4/14	Studio Class 8 am-12 noon	<ul style="list-style-type: none"> <li>• Adverse events following vaccinations and emergency preparedness</li> <li>• Strategies for increasing immunization rates</li> </ul>	<ol style="list-style-type: none"> <li>1. Identify signs and symptoms of adverse reactions that can occur after vaccinations. (3)</li> <li>2. Describe the emergency procedures for management of patients with adverse reactions to a vaccination. (3)</li> <li>3. Identify ways to improve vaccine rates (1)</li> <li>4. Discuss ways to promote an</li> </ol>	Dr. Anderson

		<ul style="list-style-type: none"> <li>• Marketing your immunization program</li> <li>• The immunization neighborhood and opportunities</li> <li>• Screening patients to identify contraindications</li> <li>• Documentation and record keeping</li> <li>• Applying ACIP and immunization schedules</li> <li>• Communicating with patients</li> <li>• Vaccine screening and documentation forms</li> <li>• Syringe and vial manipulation skills</li> </ul>	<p>immunization program (1)</p> <ol style="list-style-type: none"> <li>5. Identify ways to participate in an immunization neighborhood (1)</li> <li>6. Complete screening, vaccine documentation, and record keeping forms accurately. (1)</li> <li>7. Determine patient-specific vaccine recommendations from a patient scenario. (2)</li> <li>8. Discuss benefits of vaccines and dispel myths about vaccines</li> <li>9. Accurately prepare and measure a vaccine dose with a given syringe using aseptic technique. (5)</li> </ol>	
9/11/14	Studio Class 8am-12 noon	<ul style="list-style-type: none"> <li>• Applying ACIP and immunization schedules</li> <li>• Vaccine administration technique</li> <li>• Skills practice</li> </ul>	<ol style="list-style-type: none"> <li>1. Determine patient-specific vaccine recommendations from a patient scenario. (2)</li> <li>2. List the steps for appropriate intranasal administration of the live attenuated influenza vaccine. (4)</li> <li>3. Compare and contrast intramuscular and subcutaneous injections. (5)</li> <li>4. Demonstrate appropriate intramuscular and subcutaneous injection technique for adult immunizations. (5)</li> </ol>	Dr. Anderson
9/18/14	Studio Class and Alcoves 8am-12 noon	APhA skills testing Mock OSCE	<ol style="list-style-type: none"> <li>1. Demonstrate appropriate intramuscular and subcutaneous injection techniques (2, 5)</li> <li>2. Determine whether a patient should receive a vaccine and accurately administer appropriate vaccines and complete any associated paperwork (5)</li> </ol>	Dr. Anderson
9/25/14	Alcoves	Mock OSCE	<ol style="list-style-type: none"> <li>1. Demonstrate appropriate</li> </ol>	Dr.

	8am-12 noon	APhA final Exam	intramuscular and subcutaneous injection techniques (2, 5) 2. Determine whether a patient should receive a vaccine and accurately administer appropriate vaccines and complete any associated paperwork (5) 3. APhA final Exam (2)	Anderson
10/3/14	Integrated Lab Alcoves Times to be Announced by Assessment Committee	OSCE	OSCE (2, 5)	Faculty

**Course Evaluation (grading):**

**Point or Percentage Distribution:**

Assessment	% Of Final Grade	Date
APhA self-study exam (Required for APhA certification)	5	Must be completed before 1 <sup>st</sup> day of class
Active learning events (ALES)/ mini-assessments/assignments	20	8/28, 9/4, and 9/11 classes
Class /Group participation	10	8/28, 9/4, and 9/11 classes
APhA skills testing (Required for APhA certification)	0	9/18/14
APhA final exam (Required for APhA certification)	5	9/25/14
OSCE*	60	10/3/14

**Major assessments are indicated with a “\*”.**

**Letter grades distribution:**  
 A = 89.50 to 100% = A  
 B = 79.50 to less than 89.50%  
 C = 69.50 to less than 79.50%  
 F = Less than 69.50%

**Assignment and examination grades will be posted in Blackboard within 7 days unless otherwise stated.**

**Course Evaluation (assessment):**

**Student Evaluation:**

Survey: each student will have the opportunity to evaluate each instructor as well as course content via the school’s universal evaluation survey

**Faculty Evaluation:**

Faculty members participating in the course will attend class as often as possible to evaluate overall performance

**Attendance policy:** *Each student is required to attend class. Attendance is mandatory at graded events. Only excused absences will be accepted – see university and school policies.*

*In the event of an excused absence, it is the responsibility of the student to contact the instructor. The instructor reserves the right to use alternative assessments or assignments. Should the student fail to contact the instructor and/or not complete the alternative assessments or assignments within 7 days of the absence, zeros will be given for all the items not completed.*

**Late-work policy:** It is the expectation that all work is completed and turned in on time according to the deadlines set forth in the syllabus and/or in blackboard. Unless discussed with the instructor prior to the due date, 5 percent will be deducted each day the work (assignment, APhA exams) is/are late.

## **UNIVERSITY POLICIES**

University policies regarding **Academic Dishonesty, Students with Disabilities, University Computing Services' Acceptable Use, Affirmative Action, and Sexual Harassment** can be found at <http://www.marshall.edu/wpmu/academic-affairs/policies/>.

## **School of Pharmacy Policies**

### **SOCIAL JUSTICE POLICY STATEMENT**

Marshall University is committed to bringing about mutual understanding and respect among all individuals and groups at the University. As part of Marshall University, School of Pharmacy has made a commitment to social justice. Therefore, no one will be discriminated against on the basis of race, gender, ethnicity, age, sexual orientation, religion, social class, or differing viewpoints. Each student will be viewed as a valuable member of this class and as the faculty for the course, I will strive to facilitate an atmosphere/learning environment where mutual understanding and respect are actualized.

### **ACADEMIC, ETHICAL, AND PROFESSIONAL CONDUCT**

Student expections for academic, ethical, and professional conduct are defined within the school's [Ethical and Professional Conduct Policy](#) and the university's [Academic Dishonesty Policy](#).

### **Second Chance and Remediation Policy**

Second chance and remediation are mechanisms designed to assist students who have struggled within the classroom environment in demonstrating achievement of classroom and curricular learning outcomes. These processes are described in sections 200.001.003 (Second Chance) and 200.001.004 (Remediation) of the [Academic Standards for Grading, Progressions, Dismissal, and Re-admission Policy](#).

### **Test Security Policy**

In order to ensure the security of all examinations, the School of Pharmacy has adopted the following policies:

## 1. Test Administration

- A. Non-electronic testing
  - a. Students may not access any electronic equipment during the exam that has not been provided by the faculty, including but not limited to calculators, cell phones, laptops and PDAs.
- B. Electronic testing
  - a. Only those resources (electronic or otherwise) approved by the instructor may be used or accessed during the testing session.
  - b. Students enrolled within courses using electronic testing must download and install the [Respondus Lockdown Browser](#). The installation will require an installation code that must be acquired from Computing Services.

## 2. Test Review (not applicable to APhA exams)

- A. Students will not be allowed to view any exam without direct supervision of course faculty or site facilitator
- B. Students must review tests within time specified by the course faculty.
- C. Limited numbers of students may be allowed to view the exam at one time depending on office size, space, and faculty preference.
- D. Students will be allowed to review the exam only one time, and time limits may be placed on review as specified by course faculty.
- E. NO notes can be taken by the student while reviewing the test, and students are not allowed to access any electronics while reviewing the tests. NO copies electronic or written!
- F. Individual student printouts for exams are to be retained by the faculty.
- G. Faculty have the right to place further restrictions on test review as deemed necessary.