Physical Assessment
Fall 2015 31:725:570
(3 Credits)

Lecture in Hill Center Room 114: Fridays 8-9 am
Laboratory Sections in Room 413: Fridays 9:10 am-10:10 am, 10:15-11:15 am, 11:20-12:20 pm, 12:25-1:25 pm, and 1:30-2:30 pm
Pharmacy-Based Immunization Delivery: Friday, October 23rd at Busch Campus Student Center 604 Bartholomew Rd Piscataway, NJ 08854 (8:00AM-4:00PM)

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Resources from American Pharmacist Association (APhA) for the Pharmacy-based Immunization Delivery

Course Objectives:
Following completion of the physical assessment course, the student will:
1. Understand the role of physical assessment techniques in pharmacy practice today.
2. Master a variety of physical assessment skills that will be helpful for pharmacy practice in the retail setting, ambulatory care clinic, and acute care setting.
3. Develop skills in interviewing patients, including asking open-ended questions, taking a thorough medication history, and asking questions in the review of systems that are pertinent to a specific patient.
4. Have the opportunity to interact with faculty members during laboratory sessions in order to sharpen skills reviewed in the didactic portion of this course.

Following completion of the Pharmacy-Based Immunization Delivery, the student will:
1. Identify opportunities for pharmacists to become involved in immunization delivery.
2. Describe how vaccines evoke an immune response and provide immunity.
3. Identify the vaccines available on the U.S. market for each vaccine-preventable disease and classify each vaccine as live attenuated or inactivated.
4. Outline the target groups for vaccination based on the Advisory Committee for Immunization Practices recommendations.
5. Review patients’ medical and immunization histories and determine vaccine recommendations based on current immunization schedules.
6. Outline the steps involved in establishing a pharmacy-based immunization delivery program.
7. Discuss the legal, regulatory, and liability issues involved with pharmacy-based immunization programs.
8. Describe the signs and symptoms of adverse reactions that can occur after vaccination and the emergency procedures for management of patients with adverse reactions to vaccination.
9. Describe the appropriate technique for administration of the live attenuated influenza vaccine.
10. Demonstrate appropriate intramuscular and subcutaneous injection technique for adult immunization.

Course Organization:
- The physical assessment course is a “hands-on” course designed to familiarize the pharmacy student with basic physical exam techniques.
- The course will emphasize those exam techniques utilized in the retail setting and ambulatory clinic (i.e. blood pressure and diabetic foot exam) as well as in acute care setting (i.e. cardiac and respiratory exams).
During each class session, the instructor will discuss several examination techniques, including why each is significant for a pharmacist’s knowledge as well as what the examination is designed to illustrate.

Following the explanation of each technique, students will be given the opportunity to practice the technique on their partners.

- Each student will pair up with another student for the practical skills portions of the class.
- One student will be the examiner, while the other will be the patient.
- Faculty will assist in the practicing of the skills by the students.

**Pharmacy-based Immunization Delivery:**

- This component of the course is a certificate program that was developed by APhA.
- Pharmacy-based immunization trainers will provide students with an in-depth overview of immunizations, the role of the pharmacist, practice implementation and legal/regulatory issues.
- Three primary components of this program include:
  - Take home self-study modules with case studies and assessment exam
  - Didactic lectures
  - Final examination at the end of the program
  - Hands-on completion of intramuscular and subcutaneous injections
- Students will complete all self-study modules and final examinations using the online program.
- Each State has their own regulations regarding additional training to provide immunizations. Please see state regulations for specific details. In New Jersey, required CPR training is not being offered as part of this program and is the responsibility of the student (must be American Heart Association BLS or American Red Cross CPR). Rutgers University provides these services: [http://rues.rutgers.edu/cpr.shtml](http://rues.rutgers.edu/cpr.shtml). All students must complete their CPR training prior to the APPE orientation, which usually occurs the first week of May.

**Attire:**

- Attire for the physical assessment course will vary depending on the topic being discussed. In general, lose fitting clothing is preferred.
  - For the first lecture, it would be best to wear a short-sleeved shirt for ease in taking blood pressures and pulses.
  - For the cardiac and respiratory lectures, women should wear a sports bra and men should be prepared to remove shirts in order to locate stethoscope placement properly.
  - For the cardiac, respiratory, and abdominal exams, nails should be short. Long nails can hurt your partner when performing percussion.
  - For the Musculoskeletal/Peripheral Vasculature and Diabetic Foot Exam, loose comfortable clothing is recommended, and removal of shoes and socks will be necessary.
  - For the practical exams, please wear professional attire, and a clean, white lab coat (i.e. NO jeans, open toe shoes, or sneakers and men MUST wear ties).
Attendance will be MANDATORY at ALL lectures AND physical assessment lab sections, and each unexcused absence will result in a 3-point reduction in the final course grade.
- Please be aware of the fact that you must attend the section to which you were assigned. **Section switching will NOT be permitted.**
- Please be on time to class. Students who arrive late distract those who were on time, and that is unacceptable. **If students are late 3 or more occasions, tardiness will result in a 3-point reduction in the final course grade**
- Attendance is MANDATORY at all classes. Any absences during the Pharmacy-based Immunization Program will result in an automatic repeat of the program the following year.
- If you expect to miss a class, please use the University absence reporting website [https://sims.rutgers.edu/ssra/](https://sims.rutgers.edu/ssra/) to indicate the date and reason for your absence. An email is automatically sent to me.

**Food and Beverages:**
- Food and drinks are NOT PERMITTED in the physical assessment laboratory, due to the presence of computers and other special equipment. If food or drinks are brought into the classroom, you will be asked to discard them immediately.

**Equipment:**
- On the first day of lab, each paired student will receive an equipment box with an assigned number. It is the student’s responsibility to check that all 7 items are present prior to using the box. Faculty must be notified if any items are missing. If any equipment is missing, all students assigned to that box will receive a 2-point reduction on their final grade. Any missing equipment will not be replaced and students will still be required to perform the skill.
- **Do not remove the equipment** from the classroom. Equipment may not be signed out for home or offsite use.
- You may wish to purchase your own stethoscope and blood pressure cuff so you can practice taking blood pressures at home. These pieces of equipment are inexpensive and are available at the bookstore. This is optional.

**Worksheets, Pharmacy-based Immunization Delivery Exams, Quizzes, and Examinations:**
- Cheating on any take home assignment, quiz, and exam are **UNACCEPTABLE** per the rules and regulations of the school as well as the university. Academic misconduct will result in a grade of “ZERO” for the exam, quiz, or take home assignment, and appropriate recourse will be taken by the course coordinator and administrators.

1. **Worksheets**
   - Each week in lab, students will complete a worksheet.
   - Worksheets will guide students for the practical exams.

2. **Pharmacy-based Immunization Delivery Program**
• Emails will provide detailed directions. Students must read all emails thoroughly regarding your responsibilities. Voucher codes will also be sent by email and are not to be shared with anyone not enrolled in the program.

• Self-Study (Due 9/25) and Final Exam (Due 10/30)
  ▪ There will be one self-study and a final exam.
  ▪ **Special note:** The self-study and final exam must be completed online in order to obtain the certificate of completion.
  ▪ If you do not press “CONFIRM” your test results will not be recorded.
  ▪ DO NOT complete the self-study or final exam the night before the due date. Provide yourselves with sufficient time in case of technical problems.
  ▪ Pre-test and final exams completed past the due date will be marked late. Grades will be reduced by 10% per day.
  ▪ Students who achieve < 70% for the Pharmacy-based Immunization Program will be required to repeat the course work for the program prior to graduation.

3. **Pharmacy-based Immunization Delivery Program Injection Technique**
   • Injection technique assessment will occur on 10/5 from 8-12:00PM. Students will be randomly assigned time slots with their partner to complete injection technique.
   • The practical exams will include a hands-on assessment of intramuscular and subcutaneous injection techniques. Failure to pass this practical will result in a repeat of the exam prior to graduation.

4. **Quizzes**
   • There will be 3 quizzes in the course. The format will be multiple choices and will take place during lecture.
   • There will be NO make-up quizzes. Students will need to take a CUMMULATIVE make-up quiz for any pre-approved excusable absence.

5. **Objective Structured Clinical Examination (OSCE)**
   • There will be two OSCEs in the physical assessment course.
     ▪ OSCE 1 will include material from lectures on 9/4 through 10/2.
     ▪ The final exam will be an OSCE as well, and it will include material from lectures on 10/16 through 11/25. The Pharmacy-based Immunization Program will not be a part of the final OSCE.
     ▪ In addition, all students will be required to complete hands-on intramuscular and subcutaneous injection techniques.
Students will be asked to perform two skills on a patient, while the instructor observes and grades the student accordingly on a grading sheet. Below is a sample of a grading sheet for the skill of taking a pulse:

<table>
<thead>
<tr>
<th>Technique Performed</th>
<th>Performed Correctly</th>
<th>Performed Incorrectly</th>
<th>Not done</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient in sitting position</td>
<td>+1</td>
<td>0</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Grasp patient’s wrist with hand</td>
<td>+2</td>
<td>0</td>
<td>-0.5</td>
<td></td>
</tr>
<tr>
<td>Compress radial artery with first two fingers</td>
<td>+2</td>
<td>0</td>
<td>-0.5</td>
<td></td>
</tr>
<tr>
<td>Count pulse for 15 seconds, multiply by 4 = pulse</td>
<td>+2</td>
<td>0</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Pulse recorded is within +/- 5 beats per min of actual pulse</td>
<td>+2</td>
<td>0</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Pulse is recorded on exam paper is documented as regular or irregular</td>
<td>+1</td>
<td>0</td>
<td>-0.5</td>
<td></td>
</tr>
</tbody>
</table>

- These practical exams will allow the student to demonstrate mastery of the skills taught in lecture and reviewed during the skills sessions of each class period.
- The instructor will grade the student based upon a strict grading key (see example above) specific for each particular skill.
- Following the practical exam, the student may NOT ask the instructor how he/she performed. There will be separate office hours to allow for viewing of the grading key.
- The student should dress in a professional manner for the practical exam, including professional attire and clean, unwrinkled white lab coat. Points will be deducted for improper technique as well as lack of professional dress and/or lab coat.
- There will be NO make-up exams for students without a pre-approved excuse provided to the course coordinator prior to the exam. Students will need to take a CUMMULATIVE practical exam for any pre-approved excusable absence. If any type of problem arises, please contact the course coordinator as soon as possible.

**Practice Sessions:**
- Practice sessions will be held in room 413. The two practice sessions scheduled for the year are 10/2 from 2:30PM-4:30PM and 11/30 from 8AM-12PM. During this time, students will be able to practice with the equipment in preparation for the practical exam. This will NOT be a review session. It is simply a time for you to review the skills independently using the equipment in the plastic boxes.
- Students MUST sign up for these one-hour practice sessions. Space is limited; thus, each practice session is on a first come first serve basis. Sign up sheets will be posted in front of Dr. Siu’s office a week before the practice session.
Grading:

<table>
<thead>
<tr>
<th>Percentage of Final Grade (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz #1-3 (10% each)</td>
</tr>
<tr>
<td>OSCE #1</td>
</tr>
<tr>
<td>OSCE #2</td>
</tr>
<tr>
<td>Pharmacy-based Immunization Delivery Program Self-Study Exam (Pre-test)</td>
</tr>
<tr>
<td>Pharmacy-based Immunization Delivery Program Final Exam (Post-test)</td>
</tr>
<tr>
<td>Total Percentage</td>
</tr>
</tbody>
</table>

Final grades will be assigned as follows:

- 100-90  A
- 89-86   B+
- 85-80   B
- 79-76   C+
- 75-70   C
- 60-69   D
- < 60    F

Office Hours:
- May be scheduled as indicated by each of the course faculty members.
- Office hours will be set after the practical exams for review of the exam and quiz.
- A time period of two weeks will be allowed for students to review the grading of exams and the quiz once posted. No exceptions/grade changes will be made after two weeks.
- Please be aware that the grading keys for the practical exams are standardized, and changes cannot be made to the scoring of the key, instructor’s comments, scoring, etc. during office hours. This would disrupt the integrity of the exam and its key.

Course Instructor Evaluations:
- At the end of the semester, course and instructor evaluations will be provided to all students in the course. Your comments and feedback are greatly appreciated!

Website and Bulletin Board:
- To provide ease in communication between the students and faculty for physical assessment, the course coordinator has set up a web page for the course at the following web address: https://sakai.rutgers.edu/portal
- Students should check the site frequently, as there will be important announcements noted on the page.
- Students will be required to print the lecture handouts from the website. Handouts will NOT be provided in class.
- The following website provides additional information about the Pharmacy-based Immunization Delivery: http://www.pharmacist.com/pharmacy-based-immunization-delivery

*The course coordinator reserves the right to change format, policy or sequence at her discretion and as circumstances may dictate. Any issues not specifically addressed in this syllabus will be resolved at the sole discretion of the course coordinator, Dr. Siu.*

Fall Semester 2015
Page 7 of 10
<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>TOPIC</th>
<th>LECTURER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 4</td>
<td>8-9 AM</td>
<td>The Vital Signs</td>
<td>Dr. Siu</td>
</tr>
<tr>
<td>Sept. 11</td>
<td>8- AM</td>
<td>Neurologic Exam</td>
<td>Dr. Wagner</td>
</tr>
<tr>
<td>Sept. 18</td>
<td>8-9PM</td>
<td>Psychiatric Exam</td>
<td>Dr. Liu</td>
</tr>
<tr>
<td>Sept. 25</td>
<td>8-9 AM</td>
<td>Head and Neck Exam (Lab: include injection technique) Pharmacy Based Immunization Delivery Self-Study Due</td>
<td>Dr. Mansukhani</td>
</tr>
<tr>
<td>Oct. 2</td>
<td>8-9AM</td>
<td>Quiz #1 Integument, Hair, and Nails</td>
<td>Dr. Durie</td>
</tr>
<tr>
<td>Oct. 5th</td>
<td>8-12PM</td>
<td>Injection Technique</td>
<td>Faculty</td>
</tr>
<tr>
<td>Oct. 9</td>
<td>9-2:30 PM</td>
<td>OSCE # 1</td>
<td>Faculty</td>
</tr>
<tr>
<td>Oct. 16</td>
<td>8-9AM</td>
<td>Respiratory Exam</td>
<td>Dr. Dixit</td>
</tr>
<tr>
<td>Oct. 23</td>
<td>See Schedule on Next Page</td>
<td>Pharmacy-Based Immunization Delivery</td>
<td>Faculty</td>
</tr>
<tr>
<td>Oct. 30</td>
<td>8-9 AM</td>
<td>Pharmacy-Based Immunization Delivery Final Exam Due Abdominal Exam</td>
<td>Dr. Bridgeman</td>
</tr>
<tr>
<td>Nov. 6</td>
<td>8-9 AM</td>
<td>Quiz # 2 Eyes and Ears Exam</td>
<td>Dr. Mansukhani</td>
</tr>
<tr>
<td>Nov. 13</td>
<td>8-9 AM</td>
<td>Cardiac Exam</td>
<td>Dr. Dixit</td>
</tr>
<tr>
<td>Nov. 20</td>
<td>8-9 AM</td>
<td>Peripheral Vasculature, Diabetic Foot, and Musculoskeletal Exam</td>
<td>Dr. Das</td>
</tr>
<tr>
<td>Nov. 25 (Wednesday)</td>
<td>8-9AM</td>
<td>Quiz # 3 Principles of Pediatric Physical Assessment</td>
<td>Dr. Siu</td>
</tr>
<tr>
<td>Dec. 4</td>
<td>9-2:30 PM</td>
<td>Final OCSE</td>
<td>Faculty</td>
</tr>
</tbody>
</table>

Pharmacy-based Immunization Delivery Schedule
<table>
<thead>
<tr>
<th>TIME</th>
<th>TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-8:20 AM</td>
<td>Attendance/Check-in</td>
</tr>
<tr>
<td>8:20-10:00 AM</td>
<td>Clinical Review</td>
</tr>
<tr>
<td>10:00-10:15AM</td>
<td>Break</td>
</tr>
<tr>
<td>10:15-11:15AM</td>
<td>Managing Pharmacy-Based Immunization Program</td>
</tr>
<tr>
<td>11:15-12PM</td>
<td>Strategies for Increasing Immunization Rates</td>
</tr>
<tr>
<td>12-1PM</td>
<td>Lunch</td>
</tr>
<tr>
<td>1-2PM</td>
<td>Applying ACIP Immunization Schedules</td>
</tr>
<tr>
<td>2-3PM</td>
<td>Communicating with Patients</td>
</tr>
<tr>
<td>3-4PM</td>
<td>Vaccine Administration Technique and Adjorn</td>
</tr>
</tbody>
</table>