Meeting Time, Place, Credits

Target audience: PD1 students  
Credits: 2  
Course Web Site: https://ay15.moodle.umn.edu/  
Term: Spring 2015  
Dates: 1/19/16-5/5/16  
Locations and Times:

<table>
<thead>
<tr>
<th></th>
<th>Scheduled Days &amp; Times</th>
<th>TC Room</th>
<th>D Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion</td>
<td>Tuesday 8:00-9:55am</td>
<td>WDH 7-135</td>
<td>410 Lib</td>
</tr>
<tr>
<td>Lab Section 002 (TC only)</td>
<td>Thursday 1:25-3:20pm</td>
<td>WDH 3-150</td>
<td></td>
</tr>
<tr>
<td>Lab Section 003 (TC only)</td>
<td>Thursday 3:35-5:30pm</td>
<td>WDH 3-150</td>
<td></td>
</tr>
<tr>
<td>Lab Section 004 (TC and D)</td>
<td>Thursday 8:00-9:55am</td>
<td>WDH 3-150</td>
<td>216 LSci</td>
</tr>
<tr>
<td>Lab Section 005 (TC and D)</td>
<td>Thursday 10:10am-12:05pm</td>
<td>WDH 3-150</td>
<td>216 LSci</td>
</tr>
</tbody>
</table>

Course Instructional Team

Course Team  
Karen Bastianelli, PharmD, BCACP  
Office: LSci 221  
Phone: 218-726-6026  
Email: bast0067@d.umn.edu  
Preferred method of contact: Email  
Office Hours: By appointment

Jennifer Chen, PharmD, BCACP  
Office: WDH 3-150C  
Phone: 612-624-2544  
Email: chen0666@umn.edu  
Preferred method of contact: Email  
Office Hours: By appointment

Teaching Assistants: See course website for roster and contact information
A Note from the Course Instructional Team

It has been a pleasure to be a part of your pharmacy school curriculum. We are hopeful that you will continue to acquire new skills and hone old skills from the PCLC lab such that you may relate lab activities to “real life” situations as an intern and beyond. Building relationships with patients has always been an important aspect of our professional philosophy and we look forward to our continued progress towards this. While it is best to schedule an appointment, please feel free to stop in the office any time the door is open. You may also contact us by e-mail or phone. If you should need to alert us of an illness or a family emergency, please contact us as soon as you are safely able.

Dr. Bastianelli’s Availability: Monday 1pm-4:30pm, Tuesday and Thursday 8am-3:30pm
Dr. Chen’s Availability: Tuesday-Thursday.

Overview of the course

Course content:

This course is designed for first year pharmacy students to further introduce the profession and continue building the skills necessary to become a competent and caring pharmaceutical care practitioner. The course consists of two components: a laboratory section and a discussion. Students will also read and participate in an online book club on The Immortal Life of Henrietta Lacks by Rebecca Skloot.

Course format:

Pharmaceutical Care Skills Lab 2 comprises two distinct but integrated sections: lab and discussion. Each student must register for the discussion and one laboratory section on their respective campus. The course directors on each campus work closely to ensure similar experiences, expectations, and assessments on both campuses.

Students must refer to the Course Schedule posted on the course website in order to be prepared each week for lab and discussion. It is NECESSARY AND ESSENTIAL for all students to read through material and complete assignments prior to coming to lab and discussion. All activities are intentionally integrated and sequenced into the curriculum; therefore, all activities must be completed in order to progress through the program. Authorization may be pre-arranged with the course director in regard to making up a missed activity due to an excused absence.

Discussion Section

The discussion for the class meets once a week for 1 hour and 55 minutes. The purpose of the discussion is to provide an orientation and introduction to selected pharmacy topics and to facilitate discussions of patient care skills. Discussion is a required, essential component of this course. The discussion may include, but is not limited to, small or large group active learning exercises, discussions, or team based learning (TBL). Activities in discussion may be graded based on content or participation, so attendance is critical for your grade.

Discussions may be conducted using a Team Based Learning (TBL) approach. TBL is an active learning teaching strategy that assists students in learning how to apply course concepts. Students are expected to review material from previous labs and discussions prior to class. Students are expected to come to class prepared and will be held accountable for that preparation via the Readiness Assurance Process (RAP) and peer evaluations. The RAP includes an individual readiness assessment test (iRAT) and a re-taking of the same test as a student team. After each team readiness assessment test (tRAT), a team may appeal an answer by writing down the reason and support for their answer choice. This must occur and be given to the instructor during the 5 minutes before any large group discussion occurs. Only teams which appeal may be granted credit for successful appeals.
Lab Sections
Each lab section will meet for 2 hours. Each laboratory section may be further divided into smaller working groups. Labs will occur on a 3-week rotating schedule.

Online Book Club
Students will be reading *The Immortal Life of Henrietta Lacks* by Rebecca Skloot and participating in an online book club on the course website. Throughout the semester, students will be expected to make two thoughtful online discussion posts, and post one final reflection paper. For each online discussion and the final paper, students are expected to make two thoughtful comments on peers’ posts. One rating will be assigned to each online discussion and the final paper. Students must thoughtfully complete all components of each online discussion and final paper to receive full credit.

Expected Workload
While every student is different, and workload may vary by week, the average expected amount of time spent outside of class for this course is 2.5 hours per week for lab and 1 hour per week for discussion. If you find you are consistently spending significantly more than the expected time preparing for class, please see the course director.

Prerequisites

- Students must be enrolled in the Pharm.D. program
- Students must know the goal of the Pharm.D. program in Minnesota is to develop a competent generalist practitioner, and how a generalist practitioner is defined.
- Students should be committed to becoming a competent generalist practitioner who assumes responsibility, and is willing to be held accountable for their patients’ medication outcomes.
- Students must have successfully completed Pharm Care Skills Lab I and Foundations of Pharmaceutical Care
- Students must be concomitantly registered in all required PD1 spring courses

Computer/Technology Requirements

The University of Minnesota computer requirements are listed here:

- [http://www.oit.umn.edu/moodle/technical-requirements/index.htm](http://www.oit.umn.edu/moodle/technical-requirements/index.htm)
- Students must have ability to access course materials during lab and discussion.
- Clickers

Course Goals & Objectives

The courses included in the pharmaceutical care learning center curriculum span over six semesters. These courses build steadily on each other, until students have reached all of the goals for each course. Course goals for 6720 are listed below:

Patient Care

- Successfully perform a comprehensive patient assessment, including:
  - Interviewing a patient
  - Obtaining current medication list
  - Obtaining accurate medication history
  - Demonstrate ability to evaluate patient immunization status and recommend any necessary vaccines
- Be patient-centered and empathetic; sensitive to patients’ needs
- Identify drug therapy problems by evaluating drugs for indication, effectiveness, safety, convenience (IESC)
- Develop individualized and clinically appropriate care plans for a patient with one to three simple conditions
- Effectively document patient interactions using Care Plans and/or SOAP notes
- Be cognizant of cultural variations and potential impact on health care
- Appropriately educate patients on their drug therapy and assess for patient understanding
- Communicate effectively with all patients and their families
- Accept responsibility of providing continuing care to their patients
- Demonstrate ability to properly use and interpret select point of care screening technology (glucometers, CardioChek Plus, A1c DCA Vantage, bone densitometer)
- Demonstrate appropriate intramuscular and subcutaneous injection techniques

Extemporaneous Compounding
- Demonstrate proficiency in a complement of basic skills related to sterile and non-sterile compounding.
  - Sterile:
    - Evaluate prescriptions for IESC, including safety parameters specific to parenteral products
    - Demonstrate aseptic technique compliant with USP 797 (personal prep, cleaning hood, vial to bag, reconstitution, syringe) for a product with one to two manipulations
    - Demonstrate additional aseptic technique compliant with USP 797 for products with more than two manipulations or requiring additional techniques and equipment (TPNs, ampuls, etc)
  - Non-sterile:
    - Evaluate prescriptions for IESC
    - Demonstrate appropriate use of torsion balance
    - Demonstrate and be able to appropriately apply non-sterile compounding techniques: levigation, trituration, geometric dilution
    - Demonstrate additional non-sterile compounding skills (gels, eutectics, suppositories)

Practice Management
- Demonstrate ability to dispense a prescription in outpatient and inpatient settings, including:
  - Identifying if a prescription contains all legally required components
  - Appropriate labeling
  - Appropriate packaging
- Apply DLE skills in developing a plan to address a patient’s drug-related needs.
- Compare and contrast cost effective drug options and consider patient-specific needs.
- Work within legal implications of point of care screenings.
- Work within legal requirements of providing immunizations.

Professionalism
- Exhibit professional behavior
- Recognize the responsibility to provide service to communities
- Accept the responsibility of lifelong learning and self-reflection
- Improve own learning and peers’ learning via peer evaluations

Attendance and Tardiness Policy

Attendance in lab and discussion is mandatory, and any absence will need to be made up, whether it is an excused or unexcused absence. Discussion will start each week with announcements, and if you miss the announcements, you will still be held responsible for the content. Excused absences include: personal illness, family emergency, or school-sponsored extracurricular activities. In order to be excused, you must contact the course director (by phone or email) prior to the class session missed. Accommodations will then be made to make up the missed session. Failure to complete any assigned make-up work prior to a given deadline will result in a U for that activity. In addition, late arrival to discussion or lab is unacceptable, as it fails to project a professional demeanor. If late, an S- will be given for a portion of that activity. Students reporting more than 5 minutes late will be asked to leave and will receive a U until the activity is made up at a later date for a maximum S- grade. Students are expected to attend classes on the campus where they are enrolled.
Course Materials

Textbooks
Required books to purchase:

Required eReserve text:

Optional texts:
- Dipiro et al. *Pharmacotherapy: a Pathophysiologic Approach*, 8th Edition. McGraw Hill, 2011 (This will likely be a required text in future courses and will be provided in the lab as a reference.)

Supplies
Required supplies to purchase, available at medical supply stores or at the University Bookstore:
- Blood pressure cuff with manual sphygmomanometer
- Stethoscope

Course Website
This syllabus, as well as all of the details of the course, including schedules, pre-lab and pre-discussion activities, an overview of each activity, sample grading sheets, etc. can be found on the course website. Course announcements will also be posted on this site as necessary. It is required that students check the website at least once a week. Students will need to access this site to find and complete assignments prior to coming to discussion and lab each week.

Assessments and Grading

Graded Assessments and Assignments
The following graded assessments will count toward your final grade for this course in the following amounts:

<table>
<thead>
<tr>
<th>Date</th>
<th>Assignment/Assessment</th>
<th>Rating</th>
<th># of ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly</td>
<td>Lab*</td>
<td>S+, S, S-, U</td>
<td>27</td>
</tr>
<tr>
<td>Weekly</td>
<td>Discussions*</td>
<td>S+, S, S-, U</td>
<td>Up to 30</td>
</tr>
<tr>
<td></td>
<td>• First post &amp; 2 comments due 2/15/16</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(through Part 1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Second post &amp; 2 comments due 3/15/16</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(through Part 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Finish book before Discussion on 4/12/16</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Final Paper due 4/22/16</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(rest of book and discussion)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Review and comment on 2 peers’ papers due 4/29/16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Online Calculations Exam

Students are responsible for completing an online calculations assessment with a score of 100%. The exam will have 15 items which review the concepts covered in Phar 6728: Pharmaceutical Calculations. The assessment will be delivered online and will open early in the semester. Students are allowed as many attempts on the exam as they need to pass; however, twenty-four hours must pass between attempts. Students must pass the exam by the date it closes prior to the end of the semester; failure to pass the exam will result in a U grade. The exam must be retaken and passed prior to the end of the semester in order to pass the course. If students earn a perfect score on their first attempt, they earn an S+ grade for the exam.

Grading Information

Integrating student knowledge, skills and values into the provision and process of pharmaceutical care is a primary focus in this course. It is very important to not lose sight of this within the structure of the academic setting and grading.

Definitions of ratings in the “S+, S, S-, U” System

This course is graded A/F. This course will use a “S+/S/S-, U” rating system to provide additional qualitative feedback to students about their level of performance relative to the learning objectives and to the care of their simulated patients. All determinations of ratings will be made by teaching assistants or the course director. The definitions for each are given below.

“S”:
To be considered satisfactorily completed and receive an “S” rating, activities must meet the following criteria:
1. Be completed and handed in at their due date/time.
2. Show appropriate effort for thoroughness and accuracy in meeting the learning objectives and providing patient care.
3. Be completed in accordance with the Honor Code.

“S+”:
To receive a rating of “S+”, activities must meet the criteria for an “S” rating and not meet any criteria for an “S-” rating. In addition, the student’s method of completing the exercise and the exercise’s results must exceed the learning objectives and/or provide optimal patient care in every detail (within the limitations of the activity itself).

“S-”:
The purpose of the “S-” rating is to help the student identify components of their work that would hinder the appropriate provision of Pharmaceutical Care or any pharmacy services to patients. Compared to a numerical score, an S- illustrates to the student, an action or skill that is not appropriate professionally. It may be something that would harm a patient, something that would cause confusion for other health care providers, an unlawful procedure, or incorrect information provided to a patient.
A rating of “S-” will be given if a component of the rated activity is completed in a fashion:
1. That would result in harm to the patient.
2. That makes part or all of the “deliverable portion” of the activity (verbal or written communication, product, etc) unusable to the intended recipient (patient or other health care practitioner).
3. That is clearly not consistent with applicable Pharmaceutical Care Learning Center Policies and procedures.
4. That is clearly not consistent with applicable practice laws.

Furthermore, an “S-” rating will be given if a student:
1. Reports 1-5 minutes tardy for a laboratory activity (after 5 minutes, you will receive a “U” and be asked to leave and make up the activity at a later date).
2. The activity is not handed in at its due date and time but is handed in within 1 business day of due date and time.
3. Is not adherent to the Dress and Behavior Code (see below).
4. Does not observe the policy related to cleanliness as outlined in the syllabus.
5. Has completed an activity with an amount of effort that is less than that necessary to meet the learning objectives but that does not meet the criteria to receive a rating of “U”.
6. Received a score on a quiz of between 70-79%
7. Received a score on the lab practical of between 70-79%

Upon receipt of an “S-” rating, the student may be asked to revise some specified component of the activity at the discretion of the Course Director. This revision must be completed in the time and manner specified by the Course Director or the “S-” rating will be become an unsatisfactory, receive a “U.”

“U”:
Activities that meet any of the following criteria will be deemed unsatisfactorily completed, and will receive a “U.”
Students receiving an unsatisfactory rating may have one opportunity to make up or revise the assignment as determined by the course lead for a maximum S- rating.
1. The activity is not handed within one business day after its due date and the student has not made plans with the course director for completion of the activity.
2. The activity is handed in on time/completed on time but is completed with extremely poor effort that clearly does not meet the learning objectives and could not provide appropriate patient care.
3. The activity is not completed in accordance with the honor code.
4. The activity originally received an “S-” rating AND a revision was called for by the Course Director but the revision was not completed in the time and/or manner specified by the Course Director.
5. Student was absent from a lab activity and did not make arrangements with the Course Director ahead of time.
6. Student did not take a scheduled quiz (and did not have an approved absence) or the student failed to pass a quiz (70% is required).
7. Student did not pass the final lab practical (70% is required).

Regrade Requests
Regrade requests must be discussed with the responsible TA within 48 hours of receiving graded material. Should further questions arise, requests must be submitted in writing via email to course director within 1 week of receiving graded material. Requests received after this deadline will not be honored.

Remediation
Students are required to obtain a minimum competency level of S ratings on in- and post-lab activities for each category of lab (non-sterile compounding, sterile compounding, and patient care, as indicated on the lab schedule) and discussion, including the final lab practical (see table below). Obtaining more than the allotted number of S- ratings will require a remediation activity to be determined by the course director. Failure to remediate to expected standards will result in failure of the course. Labs labeled as “miscellaneous” and all pre-labs are exempt from this requirement. All S-’s obtained will be reflected in the final course grade (regardless of remediation).
<table>
<thead>
<tr>
<th>Percent S or Better Ratings</th>
<th>Non-sterile Compounding Labs</th>
<th>Sterile Compounding Labs</th>
<th>Patient Care Labs</th>
<th>Discussions</th>
<th>Immunizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum number of S-grades allowed before remediation begins</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

**Minimum Passing Level**

This course is graded on an A, B, C, F system. A letter grade of D will not be awarded in this course. In the Pharmaceutical Care Skills Lab courses, students must receive an S or better on 90% or more of the total ratings for any A, 85-89.9% for any B, or 80-84.9% for a C. Students must also receive S+’s on at least 10% of the total ratings to receive the highest increment of a letter grade. The following table shows how the "S+/S/S-" system will be applied to the final grade in this course, which has 72 total ratings.

<table>
<thead>
<tr>
<th>Percent S or Better Ratings</th>
<th>S-</th>
<th>S+</th>
<th>Final Grade*</th>
</tr>
</thead>
<tbody>
<tr>
<td>90% or greater</td>
<td>7 or fewer</td>
<td>Median or higher</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Below median</td>
<td>A-</td>
<td></td>
</tr>
<tr>
<td>85-89.9%</td>
<td>8-10</td>
<td>Top 1/3</td>
<td>B+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Middle 1/3</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bottom 1/3</td>
<td>B-</td>
</tr>
<tr>
<td>80-84.9%</td>
<td>11-14</td>
<td>No requirement</td>
<td>C</td>
</tr>
<tr>
<td>Less than 80%</td>
<td>15 or more</td>
<td>No requirement</td>
<td>F</td>
</tr>
</tbody>
</table>

* Grade will be assigned primarily based on number of S- ratings (rather than number of S+ ratings)

** Any U rating will lower the final course grade by one full letter grade

Statement on Extra Credit
No extra credit will be offered in this course.

Additional Policies

**Dress and Behavior Code**
The Pharmaceutical Care Learning Center is considered to be a professional setting during laboratory sessions – you are dressing for your patients, not your peers. You are required to dress in a neat, clean, and professional manner. Professional demeanor is conveyed to your colleagues and patients in your behavior as well as in your appearance. Therefore, students must practice acceptable personal hygiene and grooming as well as wear a clean white lab coat with a College of Pharmacy-issued name tag in the lab at all times. Lab coats from outside pharmacies are not acceptable unless the identification of the pharmacy is covered. Scrubs are acceptable to wear during the parenteral lab activities, but are NOT acceptable for wear during other lab activities. Clothes that would be inappropriate in a patient care setting (i.e. t-shirts, shorts, short skirts (above the knees), open-toed shoes, flip-flops, jeans (regardless of color), abdomen exposing, low-cut, or off-the-shoulder shirts, and hats) are not acceptable in the learning center. Leggings are not acceptable unless worn under a skirt or dress. It is unacceptable and unsafe (because of risk for exposure to chemicals or other hazards) to wear open shoes or shorts.
If you come to lab wearing improper attire, you will automatically be given an S- for the Pre-Lab/Lab Preparation rating for your assigned lab activity. If your improper attire poses a safety concern, you will be asked to leave and make up the activity at a later date. Furthermore, if patients (real or simulated) will be present in the learning center, you may be asked to leave at the discretion of the instructor or course director, requiring you to make up the activity at a later date.

Safety and Cleanliness
The safety of all of our students and faculty/instructors is vital to the function of the PCLC. To help ensure safety, it is crucial that students (and instructors, of course!) behave in a professional manner at all times. While working in the compounding or parenteral sections, no food or drink will be allowed. All beverages in other areas must be in a closed container. In the parenteral section, it is ESSENTIAL that all needles and lancets are properly disposed of in the sharps containers. **Students not disposing of these products properly will receive an S- in the laboratory activity.** If you have any questions about safety issues, please ask an instructor at any time.

If you or someone in your group should ever receive a needlestick, please let your instructor know IMMEDIATELY. Appropriate action will be taken at that time. If you have any known drug allergies to products we are utilizing in lab, please let the instructor know before lab starts, and appropriate accommodations can be made.

The pharmaceutical care learning center is available for all of us as a learning environment. It is expected that each of you will take care of the equipment and furniture housed in the PCLC. Your area and all of the equipment you use in the laboratory must be cleaned and put away before you leave the lab.

Disruptive Behavior
Instructors have the authority and discretion to set rules that foster student learning. As a matter of academic freedom, these rules can be tailored to the subject matter and the instructor’s teaching methods and leading objectives. For these reasons, the course instructor is the one who makes a determination about what constitutes disruptive behavior. Also, it is not appropriate to use MP3 players during class. Use of smartphones, tablets and other devices must be limited to electronic resources relevant to the current in-class activity.

Participation and Communication between Campuses via ITV
Typically PCLC courses are **NOT** conducted via ITV. In the event we use ITV,

- When you are called upon in class to give a response or ask a question, please speak loudly enough so that you may be heard by students on both campuses
- Do not talk out of turn, wait to be recognized before speaking and do not try to dominate a discussion with your questions or comments- give others a fair opportunity to participate.
- Keep on the topic at hand. If you have questions off the current topic, address these outside of class at office hours or by email with the instructor.

While we endeavor to make archives of all ITV lectures available to students in a timely way, we cannot guarantee that every course lecture will be recorded and posted successfully. ITV lecture archives are made available as a convenience and a study aid to students, but they are not considered a replacement for attending lectures. Students are responsible for the content discussed in face-to-face meetings regardless of whether lectures are successfully posted or not, and should plan accordingly.

**University of Minnesota and College of Pharmacy Policy Reference (Centralized Syllabus)**

Students are required to be familiar with all required UMN and CoP policies, e.g., Academic Freedom; Copyright; Course Evaluations; Disability Accommodations; FERPA, etc.