### Meeting Time, Place, Credits

Target audience: PD3 students  
Credits: 2  
Course Web Site: [https://ay17.moodle.umn.edu/](https://ay17.moodle.umn.edu/)  
Term: Fall 2017  
Locations and Times:

<table>
<thead>
<tr>
<th>Course</th>
<th>Scheduled Days &amp; Times</th>
<th>TC Room</th>
<th>D Room</th>
</tr>
</thead>
</table>
| Discussion | Thursday 10:10-12:05 (8/24/17 – 10/5/17)  
Thursday 8:00-9:55 (10/12/17 – 12/7/17) | Moos 1-450 | LSci 165 |
| Lab Section 002 (TC and Duluth) | Monday 8:00-9:55 | WDH 3-150 | LSci 216 |
| Lab Section 003 (TC and Duluth) | Monday 10:10-12:05 | WDH 3-150 | LSci 216 |
| Lab Section 004 (TC only) | Monday 1:25-3:20 | WDH 3-150 | N/A      |
| Lab Section 005 (TC only) | Monday 3:35-5:30 | WDH 3-150 | N/A      |

### Course Instructional Team

Sarah Schweiss, Pharm.D., BCACP  
Duluth Course Director  
Office: LSci 223  
Phone: 218-726-6012  
Email: sschweis@d.umn.edu  
Preferred method of contact: Email  
Office Hours: By appointment  

Angela Cortese, Pharm.D., BCPS  
Twin Cities Course Director  
Office: 1-130D Weaver-Densford Hall  
Phone: 612-626-9107  
Email: cort0024@umn.edu  
Preferred method of contact: Email  
Office Hours: By appointment  

Jacob Brown, Pharm.D., M.Sc.  
Office: LSci 232  
Phone: 218-726-6028  
Email: jtbrown@d.umn.edu  
Preferred method of contact: Email  
Office Hours: By appointment  

Jeannine Conway, Pharm.D., BCPS  
Office: 5-110 B Weaver-Densford Hall  
Phone: 612-625-2999  
Email: pluha003@umn.edu  
Preferred method of contact: Email  
Office Hours: By appointment  

*Teaching Assistants: See course website for roster and contact information*
Overview of the course

Course content:
This course is the final stepping stone, complementing and building upon previous experiences within the pharmaceutical care learning center (PCLC) curriculum, as you reach full achievement and competency addressed in the goals of the PCLC. In addition, each learning activity in this course will include specific learning objectives outlined on each activity’s introduction.

The course consists of two components: a laboratory section and the Applied Kinetics discussion. Students will also read and participate in a discussion on The Center Cannot Hold: My Journey Through Madness by Elyn R. Saks.

Course format:
Pharmaceutical Care Skills Lab 5 comprises two distinct sections: lab and Applied Pharmacokinetics 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 Lab Schedule posted on the course website in order to be prepared each week. It is NECESSARY AND ESSENTIAL for all students to read through material and complete assignments prior to coming to lab. 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.

Applied Pharmacokinetics Discussion Section
The Applied Pharmacokinetics Discussion for the course meets once a week for 1 hour and 55 minutes. The purpose of the discussion is to apply your previous knowledge of pharmacokinetic principles and data to the clinical use of drugs. The discussion will include a lecture component as well as group practice problem sets. Ratings for the discussion portion of the course will be based on 3 graded in class problem sets. Graded problem set will be completed individually, but notes can be used. Earning 3 S- ratings on Applied Pharmacokinetics problem sets will result in a full letter grade drop in your overall course grade.

Lab Sections
Each lab section will meet for 2 hours. Each laboratory section may be further divided into smaller working groups. Unlike previous lab courses, all lab materials are available at the beginning of the semester and labs may occur in a different order based on scheduling of the Pharmaceutical Care Clinic visit.

Book Club
Students will be reading The Center Cannot Hold: My Journey Through Madness by Elyn R. Saks throughout the semester and participate in an in-person discussion of the book during 1 hour of the discussion section.

Prerequisites

- Students must have successfully completed Pharmaceutical Care Skills Labs (Phar 6710, 6720, 6740 and 6750), Pharmaceutical Care Courses (Phar 6706 and 6716) and Pharmacokinetics (Phar 6738).
- Students who receive a grade below C in this course are subject to Academic Standing Committee policy for progression.
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.

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 6770 are listed below:

### Patient Care
- Perform successfully a comprehensive patient assessment, including:
  - Interviewing a patient
  - Performing appropriate physical assessment techniques
  - Completing a health history
  - Completing a drug utilization review
- Be patient-centered and empathetic; sensitive to patients’ culture and personal needs
- Identify drug therapy problems
- Develop individualized, culturally and clinically appropriate care plans
- Ensure that their patients are fully educated and understand their drug therapy
- Communicate effectively with all patients, their families, and other providers
- Accept responsibility of providing long term care to their patients

### Practice Management
- Effectively document the care provided to patients
- Describe compensation issues

### Extemporaneous Compounding
- Demonstrate proficiency in basic skills related to sterile and non-sterile compounding.

### Applied Pharmacokinetics
- Revisit PK concepts to strengthen understanding
- Apply concepts to patient scenarios and medications

### Professionalism
- Exhibit professional behavior
- Recognize the responsibility to provide service to communities.

This course may differ in certain aspects from your previous experiences in the PCLC. Previous experiences have involved lectures and labs including instruction and demonstration of skills prior to student assessment. While resources on the course website assist you in preparation for lab activities, you must be prepared to find answers, solve problems and perform tasks through self-directed learning. This does not imply that you are alone. Instructors are willing to help you in your preparation, but structured instruction, demonstration and review of skills in lab will typically follow student assessment. This is intended to evaluate your abilities and competencies as a self-directed learner and practitioner who will be solely responsible for the care of patients!

Our course also values group learning. Often, you will be assigned to work in groups and it is expected you contribute equally, just as you will as a member of the healthcare team. The team-based approach assures active learning and allows you to accomplish more than as an individual.

### Ways to Meet Course Goals
- Visit the course website to print off pre-labs and any readings or handouts at least 1 week in advance of when you participate in the lab activity.
• Critically review all recommended readings and presentations and complete all pre-lab assignments prior to attending lab. **Preparation is key to success in this course!** Plan on spending at least 4 hours per week in preparation for lab. Not every activity will require that amount of preparation, but that is what you can expect for the most part.
• Check your email daily for updates.
• Ask questions and seek clarification from any feedback you might not understand

**Course Policies**

**Attendance:** Attendance in lab is required and attendance for discussion is strongly encouraged and required on days that problem sets or other graded activities occur. See the Course and Make-up Policies and Grading Policies sections of the syllabus for additional information related to excused/unexcused absences.

**Tardiness:** Late arrival to Learning Center sessions is unacceptable. Tardiness of up to 1-5 minutes will result in an "S-" on the "lab prep" portion of each activity. Tardiness in excess of 5 minutes is considered an unexcused absence and will result in a "U" and the lowering of the final grade, as outlined in the Grading Policy. If you arrive at your scheduled Learning Center activity more than 5 minutes late, you may not be allowed to join this session at the discretion of the Course Director. You may be asked to reschedule this activity with the Course Director at a later date.

**Course and Make-up Policies:** Lab sessions may not be substituted without an excused absence and prior permission from the Course Director. Excused absences include illness verified by a healthcare provider’s letter, a serious family emergency, or a University-sponsored or professional event, verified by a note from the leader of the sponsoring organization. All excused absences must be arranged with the Course Director in advance of the regularly scheduled lab. In the event of an unexcused absence, students will receive a "U" and make-up work will be assigned at the discretion of the Course Director.

**Communication**
If you have a personal concern hindering your progress, or if you experience difficulties, it is critical that you initiate contact with the course director as soon as possible. We will work together to find a solution. Difficulties arise when contact is not initiated in a timely manner. Per the University E-mail Policy, “Students are responsible for all information sent to them via their University assigned email account.” In addition, the course contract requires that you should check your email once daily. Watch for emails from the course directors, section directors or teaching assistants. When communicating with email or phone, please maintain the same respect that you would in face-to-face communication.

**Student Academic Integrity and Scholastic Dishonesty (Honor Code):** Each student is bound by the following specific provisions as part of the Honor Code: Academic misconduct is any unauthorized act which may give a student an unfair advantage over other students, including but not limited to: falsification, plagiarism, misuse of test materials, receiving unauthorized assistance and giving unauthorized assistance. Each student will be required to do their own work on all assignments and exercises. Students may be allowed to work with other partners if specifically indicated for that exercise.

In this course, academic misconduct also includes removing course materials, supplies, drugs, equipment or books from the Laboratory without the course director’s or laboratory director’s permission.

**Dress and Behavior Code:**

**Professionalism:** Professional behavior is expected at all times during class in the PCLC, during discussion, and is part of the policies below. Students are expected to: exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society; demonstrate altruism, integrity, trustworthiness, flexibility, and respect in all interactions; display preparation, initiative, and accountability consistent with a commitment to excellence; deliver patient-centered care in a manner that is legal, ethical, and compassionate; recognize that one’s professionalism is constantly evaluated by others; engage in the profession of pharmacy by demonstrating a commitment to its continual improvement.

**Dress:** 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 activity, 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.

No food or drink is allowed in the compounding areas. All drinks brought into the lab must have a lid that will prevent spills. Also, it is not appropriate to use MP3 players during lab activities. Cellular phones may only be used for drug information resources.

Use of the Learning Center: The Learning Center is open 7 days a week, 24 hours a day. We ask that you do not enter the Center when courses are in session as it can be distracting to other students. It is important that sessions begin and end on time out of fairness to all students. If you attempt to work in the Center during other course sessions, you will be asked to leave and come back during a time when courses are not in session.

Learning Center Safety and Cleanliness: The safety of our students and faculty/instructors is vital to the functions of the PCLC. To help ensure safety, it is crucial that everyone behaves in a professional manner at all times. No food is allowed in the PCLC during lab activities. Drinks with a lid may be consumed in the discussion based activities but are not allowed while compounding or providing patient care. It is essential that all blood-borne products be properly disposed. Students not complying with this will receive an S- in the laboratory activity. If you have any safety questions, please ask the course director.

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

It is expected that each of you will take care of the equipment and furniture within the PCLC. Your area and all the equipment used in the Learning Center must be cleaned and put away before you leave the lab. If you are in the PCLC after-hours, you MUST pick up after yourself.

Course Feedback from Students: We expect our students to give honest, open and professional feedback that is consistent with the communication policies mentioned in the syllabus. Your feedback is important to your instructors and to future classes in the college of pharmacy. We expect this feedback to occur not only at the end of the year, but throughout the year as well.

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 learning objectives. For these reasons, the course instructor is the one who makes a determination about what constitutes disruptive behavior.

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
Assessments and assignments for the lab portion of this course will be graded using the S+, S, S-, U system. Please see the course website for rating details.

<table>
<thead>
<tr>
<th>Lab Activity</th>
<th>Number of Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation of Cytotoxic Parenteral Products</td>
<td>4</td>
</tr>
<tr>
<td>IV Compatibility</td>
<td>4</td>
</tr>
<tr>
<td>Patient Assessment Review</td>
<td>1</td>
</tr>
<tr>
<td>Pharmaceutical Care Clinic - Patient Appointment</td>
<td>3</td>
</tr>
<tr>
<td>Pharmaceutical Care Clinic - Case Presentation</td>
<td>2</td>
</tr>
<tr>
<td>Pharmaceutical Care Clinic - Case Documentation</td>
<td>3</td>
</tr>
<tr>
<td>Mental Health</td>
<td>4</td>
</tr>
<tr>
<td>Compounding</td>
<td>3</td>
</tr>
<tr>
<td>OSCE Preparation</td>
<td>3</td>
</tr>
<tr>
<td>Immunization Refresher</td>
<td>4</td>
</tr>
<tr>
<td>Drug Information</td>
<td>3</td>
</tr>
<tr>
<td><strong>Discussions</strong></td>
<td></td>
</tr>
<tr>
<td><em>The Center Cannot Hold</em> Discussion</td>
<td>1</td>
</tr>
<tr>
<td>Infectious Disease Case Discussion</td>
<td>1</td>
</tr>
<tr>
<td>Applied PK problem sets</td>
<td>3</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. Twenty-four hours must pass between attempts. Students must pass the exam by 11:59pm CT on Monday, December 4th, 2017; failure to pass the exam by the deadline 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.

**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 is clearly not consistent with applicable evidence-based literature.
3. 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).
4. That is clearly not consistent with applicable Pharmaceutical Care Learning Center Policies and procedures.
5. 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.
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".

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 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.” For each unsatisfactory rating a student receives, their final grade will drop one full letter grade.

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 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.
4. Student was absent from a lab activity and did not make arrangements with the Course Director ahead of time.
5. There is unprofessional conduct that could be considered discriminatory.
6. Students violate HIPAA provisions. Please review the HIPAA Review Document in the Pharmaceutical Care Clinic section of the course website. Your compliance with these provisions is essential as we are working with real patients.
7. Student earns 3 S- on their applied PK problem sets.

Regrade Requests
Regrade requests must be submitted in writing via email to the Course Director within 2 weeks of receiving graded material. Requests received after this deadline will not be honored. Regrade requests to move from an “S” to an “S+” rating will also not be honored.

Demonstration of Minimum Competency
At this point in the curriculum, we expect that you will be competent in your non-sterile and parenteral compounding techniques and documentation; meaning that you will need to receive at least an “S” rating on your technique and preparations. If an S- is earned in the “IV Compatibility” lab or the “Compounding” lab (excluding pre-labs) re-demonstration of minimum competency will be required. Students will have one additional attempt to demonstrate minimum competency. Failure to demonstrate minimum competency during this additional attempt will result in failure of the course. Activities to demonstrate minimum competency are determined at the discretion of the Course Directors and will include meeting face-to-face.

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 lab 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 lab 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 41 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>5 or fewer</td>
<td>Median or higher</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Below median</td>
<td>A-</td>
</tr>
<tr>
<td>85-89.9%</td>
<td>6-7</td>
<td>Top 1/3</td>
<td>B+</td>
</tr>
<tr>
<td></td>
<td>Middle 1/3</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>------------</td>
<td>-----</td>
<td></td>
</tr>
<tr>
<td>Bottom 1/3</td>
<td>B-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80-84.9%</td>
<td>8-9</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Less than 80%</td>
<td>10 or more</td>
<td>F</td>
<td></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

**Posting of Grades/Ratings:**
Ratings and grades will be available in the course website gradebook in a timely manner following activity completion.

*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.