

Pharmacy Outcomes
Phar 6780 (2.5 credits)
Spring 2020
SYLLABUS

Course Directors:

Duluth

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Office Hours: Please email Dr. Swanson to schedule an appointment.

Course faculty:

Jeannine Conway

Caroline Gaither

Stephen Schondelmeyer

SOAP note graders and Drug Info graders: Please see the course Canvas site

Room and Time:

Duluth students meet on Wednesday at 2:30-4:25pm in Lib 410

TC students meet on Fridays 9:05-11:00am in WDH 7-135

Overview of the course

Course purpose:

The goal of this course is to facilitate integration knowledge of basic sciences, pharmacotherapy, pharmacy practice management, pharmaceutical care, written communication, literature evaluation, drug information retrieval, law and ethics, social determinants of health, population health, pharmacoeconomics and how to manage patients with multiple medical conditions. We will also discuss the role of pharmacists in organizations and society and current policy issues. This course is where students are required to perform and demonstrate knowledge during curricular assessments.

Course activities:

Faculty and students will meet on in-class discussion dates and as otherwise indicated. See the Course Schedule for details.

This course meets its objectives using several evaluated methods: Written pharmacotherapy patient cases, in-class discussions, drug information questions, a book club, the PCOA (Pharmacy Curriculum Outcomes Assessment), an objective standardized clinical exam (OSCE), and a calculations exam.

❖ Patient Case SOAP notes

1. Cases will be posted on the course website per the schedule at the end of the syllabus. All cases will address multiple medical conditions. Recommended readings and online resources will also be listed, as appropriate.
2. Each student is responsible for “completing the SOAP note” and submitting it via Canvas by the designated date. **All notes are due on Wednesdays at 8:00am.**
3. Each student is responsible for working-up and understanding each case.

Students may work with each other; however, each student must submit his/her own work (see honor code). Case content will not be limited to only conditions and medications covered in the formal curriculum as it is highly likely students will encounter future patients with unfamiliar conditions and medications.

❖ In-class discussions

In-class discussions will be comprised of case discussions of assigned SOAP notes and other topics to prepare students for APPEs as outlined on the course schedule. In-class activities will vary. Case discussions will focus on prioritization of the patient’s problems, further dissection of the case, and follow up of clinical topics with additional questions or issues to consider. ***Each student is responsible for bringing a copy of their note to the case discussion (either printed or electronic is acceptable).***

Other in-class discussions may include pre-class assignments to prepare the group for the in-class time. These sessions may address pharmacy practice management issues, pharmaceutical care process, written communication skills, literature evaluation, drug information retrieval, law and ethics, public health and pharmacoconomics.

❖ Drug Information Questions/Short Clinical Consult Notes

Each student is responsible for completing drug information questions per the schedule at the end of the syllabus. **Answers to Drug Information Questions are due on Wednesdays at 8:00am.** The questions will range from simple (does this medication need to be taken with food) to complex (can a patient be started on X medication when they take 14 other medications OR requiring you to make a recommendation for the given scenario). Each student is expected to provide a clear, direct answer that another provider or patient could use to take action. BE CAREFUL, you may need to reconcile multiple references to formulate your answer.

Each answer will require 3 fields of information: Your answer, your rationale, and your references, including the reference’s strengths and limitations. The answer field should contain the answer to the specific question written at an appropriate level for the person asking the question (e.g. patient vs. provider). If you are giving a dosing recommendation, make sure it is a *specific* recommendation and not a dosing range. For example, “*The usual dose ranges between 10 mg and 40 mg given by mouth daily. I recommend starting at 10 mg by mouth daily, increasing by 10 mg per day per week until an adequate response is seen*” would be an acceptable response. The rationale field should explain in detail why you chose your specific answer and be written so that another pharmacist can follow your reasoning. The references field should include at least 2 references that are cited appropriately (see the How to Cite References Handout on Canvas) and include 2 strengths and 2 limitations to your chosen references.

❖ Book Club

We will be reading “How We Do Harm” by Otis Webb Brawley, MD. The book is divided into four sections. You will be asked to respond to a prompting question with a minimum of a 200 word response for the first two parts of the book. The full book (including parts three and four) will be discussed during the in-class book club discussion as outlined on the course schedule.

❖ PD3 Knowledge and Performance Exams

The College successfully underwent reaccreditation in the fall of 2015. ACPE standard 24.1 requires that the assessment plan incorporates systematic, valid, and reliable knowledge-based and performance-based formative and summative assessment. Standard 24.2 requires that the assessment plan includes standardized assessments as required by ACPE that allow for national comparisons and college- or school-determined peer comparisons.

Knowledge Exam

The College will be administering the PCOA (Pharmacy Curriculum Outcomes Assessment) as mandated by the 2016 ACPE accreditation requirements. Testing session assignments have already been made. If you do not take the exam your course grade will drop a full letter grade. Your total score percentile compared nationally will determine the rating you earn. Students who score in 20th percentile or less will earn a S-. Students who score between the 20th and 90th percentile will earn an S. Students who score in the 90th percentile or above will earn a S+.

Objective Structured Clinical Exam (OSCE)

The College is continuing to provide an OSCE exam as a performance-based assessment (as outlined above in Standard 24.1 and 24.2). **This will be held on Monday February 3rd for TC students and Friday February 7th for Duluth students.** Other required courses are cancelled on both of these days. It will be held at the Interprofessional Education Resource Center (IERC) on the Twin Cities campus and at the Robert F. Pierce Speech–Language–Hearing Clinic in Duluth. A pass score will be set during the exam construction process. Students who score at or above the pass score will receive an S. Students scoring below the pass score will receive an S-. If you do not take the exam your course grade will drop a full letter grade.

Calculations exam

Students are responsible for completing an online calculations assessment with a score of 100%. A score of 100% on the first attempt will earn an S+. Otherwise, once the exam is passed a S will be assigned. The exam will have 15 items which will 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 Wednesday April 29th at 8:00am CT. Failure to pass the exam by this date and time will result in a full letter grade drop in your final course grade. The exam must be retaken and passed prior to the end of the semester in order to pass the course. This course will end on the last day of instruction, Friday May 8th, 2020.

Course Goals & Objectives

After completion of this course, students will be better able to:

- Communicate drug therapy recommendations appropriately (verbal and written), demonstrating cultural awareness Interpret medical literature and apply new knowledge to clinical situations involving both individual
- patients as well as populations
- Retrieve and provide reliable drug information
- Assess medication optimization through implementation of the patient care process, differentiating how the process differs between practice settings
- Integrate clinical, humanistic, and economic data to develop a drug therapy plan
- Determine therapeutic endpoints and monitor medication regimens
- Articulate the value of professions to society
- Understand how a professional values may conflict with organizational values
- Demonstrate the ability to investigate, interpret and argue a public policy issue that has implications for pharmacists

Other skills that may be reviewed include conducting a patient-specific medical and medication history, understanding different pharmacy practice models, recognizing the importance of pharmacy law and ethics in decision making, evaluating outcomes of clinical interventions, and applying public health knowledge.

Prerequisites

- As an Outcomes course, this course will build on all previous Pharm.D. coursework.
 - Year 1 curriculum: 6700, 6702, 6704, 6706, 6708, 6710, 7310, 6716, 6718, 6720, 6722, 6724, 6726, 7325
 - Year 2 curriculum: 6732, 6734, 6736, 6738, 6740, 6742, 7330, 6748, 6750, 6752, 6754, 6756, 6758, 7340, 7345
 - Year 3 curriculum: 6762, 6768, 6770, 6774, 6782

Course Materials

Required

Book club book: How We Do Harm by Otis Webb Brawley, MD

Optional

Any references necessary to successfully complete the cases or drug information scenarios.

Computer/Technology Requirements

- Canvas: This course will use Canvas to distribute learning materials and host activities.
 - Course site: <https://canvas.umn.edu/courses/162685>
 - Course instructors will communicate through Canvas about course announcements and issues.
- E-Mail: Course instructors may communicate individually through email about course concerns or issues. You should check your U of M email daily.
- Student-response systems: Discussions may use Participoll or other class response software. Please bring an online device to every session

Course Policies

Attendance Policy

Students are expected to attend every class for which they are registered. Students are expected to attend classes on the campus where they are enrolled. If a student is absent for in-class discussions and/or examinations and the absence is not excused and does not meet the University definition of an excused absence, they will be assigned an S- rating. When pre-class assignments are required, students who complete them before class discussion earn an S+ rating for the in-class discussion. Students who attend class but do not complete the pre-class assignments will be assigned an S rating. If there is no pre-class assignment posted, students who attend class will all receive an S rating (no S+ ratings are given). Each class session will have a mechanism to take attendance (ie in-class assignment, sign-in sheet). Each student must be present in the room and verify attendance on their own. Failure to do so will result in a breach of the honor code and will be reported to the honor council.

Classroom Etiquette Statement

Your professional community starts here at the College of Pharmacy with your peers, faculty, preceptors, staff and administration. It is our expectation that you will exhibit professional behavior towards other students and faculty in the classroom at all times.

Statement on Penalties for Late Work

"U" grade will be given if the assigned activity is not handed in within 24 hours after its due date and time.

Grading Information

The first 3 SOAP notes will be graded in their entirety, but only the structure ratings will count towards a grade. The last 3 notes will be graded in their entirety and both the structure and clinical content ratings will count towards a grade.

All grading in this course is done by pharmacists or pharmacy students. All determinations of ratings will be made by

1) the teaching assistants with the guidance and supervision of the Course Director or 2) the course faculty.

In addition to the requirements put forth by the rubrics, the following criteria will be applied to student work.

"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+", the activity 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 activity and the activity's result must 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.

A rating of "S-" will be given if a component of the rated activity is completed in a fashion:

- 1) That would provide less than satisfactory care to the patient or result in harm to the patient.
- 2) That is clearly not consistent with applicable evidence-based literature.
- 3) That is clearly not consistent with applicable practice laws.

Furthermore, an "S-" rating will be given if a student:

- 1) The activity is not handed in at its due date and time but is handed in within 24 hours of the due date and time.
- 2) 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 ("U") and result in a grade reduction.

"U": Activities that meet 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 as described in the course contract.

- 1) The activity is not handed in within 24 hours after its due date and time.
- 2) The activity is handed in on time but is completed with extremely poor effort that clearly does not meet the majority of the learning objectives and could not provide appropriate patient care (i.e. Markedly lacking detail rating).
- 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.

Distribution of ratings:

Activity		
Case documentation: notes 1, 2, 3	1 rating/note	3 ratings
Case documentation: notes 4, 5, 6	2 ratings/note	6 ratings
Participation in case discussion	1 rating/class discussion	6 ratings
Book Club		3 ratings
- In-class iRAT	1 rating	
- Online assignments (2 total)	1 rating/assignment	
11 drug info questions	1 rating/question	11 ratings
Journal club		1 rating
Non-SOAP note case discussions (Intro, opioid cases, transgender)	1 rating for each session	3 ratings
Professionals in Society sessions	1 rating for session 1 2 ratings for session 2	3 ratings
APPE preparation session		1 rating
Skill assessment (OSCE)		1 rating
PCOA exam		1 rating
Calculation exam		1 rating
		Total = 40 ratings

Course Letter Grades:

The following table shows how the "S+/S/S-" system will be applied to the final course grade.

Number of S- ratings received	Grade
4 or fewer	A
5	A-
6-7	B*
8-9	C*
10	D
11 or more	F

*S+ ratings may be used to elevate a B to a B+ and C to a C+. Students must earn at least the classes' median

number of S+'s to elevate their grade.

Grading Clarification and Re-grade Requests: If you have questions or concerns with grades, please contact your evaluator first. The course directors have final say in the grade if the student and evaluator disagree. All formal requests for re-grades must be initiated within one week from when the evaluation is released.

Minimum Passing Level

Per University and College Policy, students who receive a grade below D in this course must successfully repeat the course before advancing to courses which require this course as a prerequisite.

Course Schedule

2020 Schedule

Week	Date	Assignment	Topics/class schedule	Faculty
1	Wed 1/15		Duluth: Course Introduction	Schneiderhan, Swanson, Conway
	Thurs 1/16		TC: PCOA exam - see schedule	
	Fri 1/17	Case 1, DI 1 & 2 posted	Duluth: PCOA exam - see schedule TC: Course Introduction	Schneiderhan, Swanson, Conway
2	Wed 1/22	DI 1 & 2 due @ 8am	Duluth: No class	
	Fri 1/24		TC and Duluth: PCOA exam - see schedule (TC: No class)	
3	Wed 1/29	Case 1 due @ 8am	Duluth: Case 1 discussion	VanHooser
	Fri 1/31	Case 2, DI 3 & 4 posted	TC: Case 1 discussion	Philbrick
4	Mon 2/3		TC: OSCE	
	Wed 2/5	DI 3 & 4 due @ 8am Book club assignment 1	Duluth: Opioid case discussion	Blue, Howard

		due @ 8am		
	Fri 2/7		Duluth: OSCE TC: Opioid case discussion	Howard, Massey, Walburg
5	Wed 2/12	Case 2 due @ 8am	Duluth: Case 2 discussion	Schneiderhan
	Fri 2/14	Case 3, DI 5 & 6 posted	TC: Case 2 discussion	Schneiderhan
6	Wed 2/19	DI 5 & 6 due @ 8am	Duluth: No class	
	Fri 2/21		Duluth AND TC: Transgender session	Sauer, Haugland, Thompson
7	Wed 2/26	Case 3 due @ 8am	Duluth: Case 3 discussion	Elton
	Fri 2/28	Case 4, DI 7 posted	TC: Case 3 discussion (Room change: Moos 2-620)	Atwood
8	Wed 3/4	Book Club Assignment 2 due @ 8am	Duluth: Professions in Society	Gaither, Schondelmeyer
	Fri 3/6		TC: Professions in Society	Gaither/ Schondelmeyer
9	3/9-3/13		Spring Break: No class	
10	Wed 3/18	DI 7 due @ 8am	Duluth AND TC: Journal Club	Langworthy
	Fri 3/20		TC: No class	

11	Wed 3/25	Case 4 due @ 8am	Duluth: Case 4 discussion	TBD
	Fri 3/27	Case 5, DI 8 & 9 posted	TC: Case 4 discussion	Funk
12	Wed 4/1	DI 8 & 9 due @ 8am	Duluth: Book club (full book)	Schneiderhan
	Fri 4/3		TC: Book club (full book)	Swanson
13	Wed 4/8	Case 5 due @ 8am	Duluth: Case 5 discussion	Anderson-Haag
	Fri 4/10	Case 6, DI 10 & 11 posted	TC: Case 5 discussion	Anderson-Haag
14	Wed 4/15	DI 10 & 11 due @ 8am	Duluth: Professions in Society 2 (Debates)	Gaither, Schondelmeyer
	Fri 4/17		TC: Professions in Society 2 (Debates)	Gaither, Schondelmeyer
15	Wed 4/22	Case 6 due @ 8am	Duluth: Case 6 discussion	Aulie
	Fri 4/24		TC: Case 6 discussion	TBD
16	Wed 4/29	Calculations exam deadline @ 8am	No class	
	Fri 5/1		Pharmacy Day No class	
17	Wed 5/6		Duluth AND TC: APPE Bootcamp	
	Fri 5/8		No class	

** Subject to change at course instructor's discretion.*

Educational research may be conducted on this course design, including any assignments and comments on course evaluations. Any research conducted will occur only after the course has concluded and final grades have been submitted. Any course materials used in the evaluation of educational strategies will first be stripped of any identifying information by a research assistant unrelated to the course. Any materials used for the evaluation of this course will not be able to be linked to any individual student.

[University of Minnesota and College of Pharmacy Policy Reference \(Centralized Syllabus\)](#)

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