

Phar 6772 Topics in Pharmacotherapy

Care

Course Syllabus, Fall 2020
1.6 Credits



This course adheres to the items listed in the College of Pharmacy Central Syllabus:

https://docs.google.com/a/umn.edu/document/d/1artQ5e1rbzxe8IEtWo7BE8k8snZAEgMMz_QcW8yJ-II/edit?pli=1
https://docs.google.com/a/umn.edu/document/d/1artQ5e1rbzxe8IEtWo7BE8k8snZAEgMMz_QcW8yJ-II/edit?pli=1

Meeting Times & Locations

Dates: September 19 - December 12

Day	Time	Duluth Room	Twin Cities Room
Thursday (Beginning September 24th)	8:00 - 9:55	Zoom	Zoom
Friday (Beginning September 25th)	8:00 - 9:55	Zoom	Zoom

Course Web Site: <http://canvas.umn.edu>

Instructional Team

If you need assistance with the course, contact one of the Teaching Assistants.

Technology Help, Duluth: 218-726-8847 itsshhelp@d.umn.edu

Technology Help, Twin Cities: 612-301-4357 help@umn.edu

<mailto:help@umn.edu>

Faculty Office Hours: by appointment

Course Directors

Michael Swanoski, Pharm.D., BCGP, FASCP

139 Life Science

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PHAR 6772 Syllabus, Fall 2020, University of Minnesota College of Pharmacy

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Course Instructors

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Diana Langworthy, Pharm.D., BCPS
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Teaching Assistants

Canvas TA: Gerrit Vreeman
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Jessica Barry
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Course Content:

This course is designed to provide students with the pharmacologic, pharmacotherapeutic, and pharmaceuticals knowledge they need to understand therapies for dermatologic, gastrointestinal, and genitourinary conditions, and arthritis and gout. It is designed to prepare future generalist pharmacists to be knowledgeable about common conditions of aforementioned topics and appropriate pharmacotherapy options for treatment. It will focus primarily on pharmacotherapy but will have an overview of pathophysiology of these conditions. Students will be expected to apply knowledge to design and monitor a patient-centered pharmaceutical care plan and to appropriately educate patients regarding proper use of medications covered in the course. This course prepares students to be able to: identify clinically relevant information in the modern health care setting, learn it at a depth beyond memorization, and apply and interpret its application to relevant patient case vignettes.

Course format:

This course will meet (broadcast) for two 50 minute class periods on Thursdays and Fridays. Class time will be used for **lectures** and various types of **learning activities** (discussion, problem-solving, small group, etc.).

Before each topic area, students will complete assigned readings.

Prerequisites

- Students must have completed all required Year 2 Pharm.D. courses successfully before beginning this course. Foundational information learned in Year 1 and 2 courses will be built upon in this course.

Requirements**Course Materials****Required**

- *Applied Therapeutics: The Clinical Use of Drugs* 11th ed. (2018). Students will have access to this as an eTextbook.
- Handbook of Nonprescription Drugs
- Readings-The required readings for the course will include chapters from the text above, additional reading outlined in the course schedule on Canvas, or assigned in class. Students are strongly urged to review the assigned readings prior to class to aid in the understanding of lecture material. Questions from the required readings may be included in course examinations (in addition to lecture and handout material).

Computer / Technology Requirements

- Canvas: This course will use Canvas to distribute resources and host course activities.
- Zoom: This course will use Zoom to broadcast lectures and host course activities.
- E-Textbooks: The Applied Therapeutics textbook will be provided as an e-text.
- Email: Course instructors will communicate through email about course administrative issues. We suggest that you check your U of M email daily.

Attendance Policy

Students are encouraged to attend synchronous on-line class periods in order to have the opportunity to ask questions during the live presentation. Students are expected to attend every class for TBL sessions, patient interviews, P&T discussion, and other active learning activities.

Case Sessions

Patient interviews will not be recorded. If you are absent for a patient case session, and you do not have an excused absence, you will receive 0 points for that session. It is up to the discretion of the instructor whether you will need to complete an outside assignment to receive case points. Case sessions are excellent learning opportunities and you are expected to attend. No formal assessments will be done during case sessions, but material from case sessions will be assessed on exams.

Goals & Objectives

Learning Objectives

1. Explain the basic pathophysiology associated with common GI/Arthritis/Gout/GU/Derm conditions.
Domain Competencies: 6.3.1, 6.3.2, 6.3.3 Scientific Foundations: 1.1.1, 1.2
2. Contrast and compare available pharmacotherapeutic options to manage patients with one or more common GI/Arthritis/Gout/GU/Derm conditions.
Domain Competencies: 1.1, 1.2, 6.0, 6.1, 6.3.1, 6.3.2, 6.3.3, 6.4.2, 6.4.5, 6.4.6 Scientific Foundations: 6.1.10, 6.4
3. Evaluate, monitor and modify pharmacotherapeutic plans for managing patients with common GI/Arthritis/Gout/GU/Derm conditions.
Domain Competencies: 1.1, 1.2, 6.0, 6.1, 6.3.1, 6.3.2, 6.3.3, 6.4.2, 6.4.5, 6.4.6 Scientific Foundations: 6.4
4. Identify, resolve and/or prevent drug therapy problems, and develop pharmacotherapeutic goals for patients with GI/Arthritis/Gout/GU/Derm conditions.
Domain Competencies: 1.1, 1.2, 1.5, 1.8, 6.0, 6.1, 6.3.1, 6.3.2, 6.3.3, 6.4.2, 6.4.5, 6.4.6 Scientific Foundations: 6.4
5. Describe how to interview and/or educate patients experiencing GI/Arthritis/Gout/GU/Derm conditions.
Domain Competencies: 1.4, 6.4.6 Scientific Foundations: 5.8.3

Assessments and Grading

Assignments and learning activities

Reading assignments, Cases, Quizzes, Exams are listed by dates.

Graded Assessments

Assessment	Points	Approximate% of Grade
Dermatology Patient Interview 1 (In-class attendance quiz)	10	2%

Dermatology Patient Interview 2 (In-class attendance quiz)	10	2%
Dermatology Patient Interview 3 (In-class attendance quiz)	10	2%
Dermatology Exam (Exam Soft)	100	21%
Genitourinary Exam (Exam Soft)	65	14%
P&T (In-class attendance quiz)	10	2%
Gastrointestinal #1 TBL (IRAT/TRAT)	30	6%
Gastrointestinal #2 TBL (IRAT/TRAT)		
Gastrointestinal #3 TBL (IRAT/TRAT)		
Gastrointestinal Quiz (Canvas)	10	2%
Gastrointestinal (In-class attendance quiz)	10	2%
Gastrointestinal Exam (Exam Soft)	100	21%
Arthritis/Gout Quiz (Canvas)	20	4%
Arthritis/Gout Exam (Exam Soft)	100	21%
Total	475	100%

Exam Information

You will take four unit exams in this course:

Exam 1 -- Dermatology (Larson)

- Exam #1 will be a multiple-choice exam. Specific case vignettes will be provided to which “best response” answers will be offered with appropriate detractors that are aimed to differentiate major therapeutic issues discussed in class.
- This exam will be administered using Exam Soft.
- The exam is timed to be given over 50 minutes during designated time.

Exam 2 -- Genitourinary (Swanoski)

- Exam #2 will be a multiple-choice exam. Specific case vignettes will be provided to which “best response” answers will be offered with appropriate detractors that are aimed to differentiate major therapeutic issues discussed in class.
- This exam will be administered using Exam Soft .
- The exam is timed to be given over 50 minutes during designated time.

Exam 3-- Gastrointestinal (Pereira/ Langworthy)

- Exam #3 will be a multiple choice exam consisting of case-based questions. Specific case vignettes will be provided to which “best response” answers will be offered with appropriate detractors that are aimed to differentiate major therapeutic issues discussed in class.
- This exam will be administered using Exam Soft
- The exam is timed to be given over 50 minutes during designated time .

Exam 4 -- Arthritis/Gout

- Exam #4 will be a will be a multiple-choice exam
- This exam will be administered using Exam Soft .
- The exam is timed to be given over 50 minutes during designated time .

Course Letter Grades

Grade	A	A-	B+	B	B-	C+	C	C-	D	F
%	100-93	92-90	89-87	86-83	82-80	79-77	76-73	72-70	69-60	59-0

Grading Information

The course will be out of 475 points. Grades will be determined by four quizzes, two gastrointestinal cases, three dermatology cases, and four exams. Final grades ending in 0.5 or higher will be rounded up to the next highest percentage.

Statement on Penalties for Late Work

Exams and quizzes will have specific times when they are available. Students should be aware and access them during the stated times.

Exam Policy

All exams will be available during a specific scheduled time. Exams will not be graded on a curve.

Exams will be comprehensive and will build on previous content. Standard analyses of composite class responses for all exam questions will be conducted by the authors of those exams prior to releasing the scores.

An opportunity to request an exam regrade is provided for all exams through an online system (see below).. Faculty will, however, facilitate the student's ability to view their exams at some point either during or outside of class time. This will be your only chance to comprehensively review your exam. If you have extenuating circumstances, you may schedule an appointment with the course director (or the Teaching Assistants, at the course director's discretion) to review any of your exams.

Grades will not be given out over the telephone or by email.

Exam Regrade Policy

If you would like to submit your examination for regrade, you need to email your issue directly to the instructor ([item-author](#)) for the exam, with information that details the question number and reasons why you feel your answer is correct, within 48 hours from the date of exam viewing. The item-author for the question will consider the request and rule on the decision with appropriate consultation/communication with the course director.

Absence from Exams, Case Sessions, TBL sessions

Any absence from an exam session must be approved by a course director prior to the specific scheduled time in which the exam is given. For unexcused absences from exam, students must take the exam within 48 hours and will only receive 50% credit. If not made up in 48 hours students will receive a score of zero. For unexcused absences from TBL and Case Sessions, student will receive zero points, though student can drop lowest TBL score.

Statement on Extra Credit

No extra credit will be offered in this course.

Schedule

Week 1	
09/24/20 (10 minutes)	<p>Introduction/Orientation to the Course Swanoski / Larson</p> <p>Assignments</p> <ul style="list-style-type: none"> • None
09/24/20 Hour 1	<p>Derm: Primary and Secondary Lesions Larson</p> <p>Assignments (Hypertext links to articles on Canvas)</p> <ul style="list-style-type: none"> • Applied Therapeutics, Chapter 39, Assessing the Dermatologic Patient. • Patient Assessment in Pharmacy, Chapter 8, Anatomy and Physiology Overview <p>Read, review, and prepare cases in the Chapter</p>
09/24/20 Hour 2	<p>Derm: Primary and Secondary Lesions Larson</p> <p>Assignments (Hypertext links to articles on Canvas)</p> <ul style="list-style-type: none"> • Applied Therapeutics, Chapter 39. <p>Read, review, and prepare included cases in the Chapter</p>
09/25/20 Hour 1	<p>Derm: Drug-induced Dermatologic Changes Larson</p> <p>Assignments (Hypertext links to articles and presentations on Canvas)</p> <ul style="list-style-type: none"> • Applied Therapeutics, Chapter 39, Assessing the Dermatologic Patient. Read, review, and prepare included cases in the Chapter <p>Drug-Induced Skin Disorders URL introduction Karen Peterson presentation</p>
09/25/20 Hour 2	<p>Derm: Drug-induced Dermatologic Changes continued (Case 1) Patient Interview, SJS, TEN Larson, Dr. Rasmussen</p> <p>Assignments (Hypertext links to articles on Canvas)</p> <ul style="list-style-type: none"> • E-Medicine Overview of Stevens-Johnson URL • E-medicine article comparing: Erythema multiforme, SJS and TEN • Applied Therapeutics Drug Eruptions, Erythema multiforme, SJS, TEN <p>Read, review, and prepare included cases in the Chapter</p>

Week 2	
10/1/20 Hour 1	<p>Derm: Common Dermatologic Conditions Larson</p> <p>Assignments</p> <ul style="list-style-type: none"> • Handbook of Nonprescription Drugs, Chapter 33, Scaly Dermatoses, sections on Seborrheic dermatitis and Psoriasis • Topical Corticosteroids: Applied Therapeutics. Chapter 39 • phototherapy-psoriasis-old-not-forgotten article (URL on Canvas)
10/1/20 Hour 2	<p>Derm: Common Dermatologic Conditions (Case 2) Patient interview, Atopic/Eczema Disorder Larson, Amy Rosenholm</p> <p>Assignments</p> <ul style="list-style-type: none"> • Applied Therapeutics, Chapter 39, case 39-5
10/2/20 Hour 1	<p>Derm: Common Dermatologic Conditions Larson</p> <p>Assignments</p> <ul style="list-style-type: none"> • Applied Therapeutics, Chapter 41 <p>Read, review, and prepare included cases in the Chapter</p>
10/2/20 Hour 2	<p>Derm: Common Dermatologic Infections (Case 3) Larson</p> <p>Patient Interview, Psoriasis Larson, Dr. Carlson, Dr. Ranelli</p> <ul style="list-style-type: none"> • Suggested ref: AAD guidelines for treatment of psoriasis <p>Assignments</p> <ul style="list-style-type: none"> • Applied Therapeutics, Chapter 41, Psoriasis Read, review, and prepare included cases in the Chapter • Handbook of Nonprescription Drugs Chapter 41, pp 745-59, Fungal Infections • Applied Therapeutics, Chapter 78, Case 78-1 Tinea pedis • Handbook of Nonprescription Drugs Chapter 42, pp 761-71, Warts • Applied Therapeutics, Chapter 79, Varicella-Zoster (Clinical Features) • Applied Therapeutics, Chapter 81, Scabies, Case 81-12
Week 3	
10/08/20 Hour 1	<p>Derm: Common Dermatologic Disorders Larson</p> <p>Assignments</p> <p>Applied Therapeutics, Chapter 42, Photo aging Read, review, and prepare included cases in the Chapter Suggested ref: AAD guidelines for diagnosis and treatment of atopic dermatitis</p>

10/08/20 Hour 2	Derm: Neoplastic Dermatologic Disorders Larson Assignments Suggested ref: AAD guidelines for diagnosis and treatment of melanoma Applied Therapeutics, Chapter 42, Skin Cancer
10/09/20 Hour 1	GU: Urinary Incontinence Lecture #1 Swanoski Assignments <ul style="list-style-type: none"> • Read Applied Therapeutics, Chapter 109, Core Principles and Urinary Incontinence Sections
10/09/20 Hour 2	GU: Urinary Incontinence Lecture #2 Swanoski Assignments <ul style="list-style-type: none"> • Read Applied Therapeutics, Chapter 109, Core Principles and Urinary Incontinence
10/09-11 50 minutes	DERM Exam (Exam Soft opens: 10/9 at 12:05 pm- closes: 10/11 at 5:00 pm)
Week 4	
10/15-16/20	No Class IPPE week
Week 5	
10/22/20 Hour 1	GU: Benign Prostatic Hyperplasia Swanoski Assignments <ul style="list-style-type: none"> • Read Applied Therapeutics, Chapter 109, Benign Prostatic Hyperplasia
10/22/20 Hour 2	GU: Erectile Dysfunction Swanoski Assignments Read Applied Therapeutics, Chapter 109, Sexual Dysfunction
10/23/20 Hour 1	P&T Dr. Rivers, Pharm.D. Assignments <ul style="list-style-type: none"> • ASHP Guidelines article • Nebraska Experience article
10/23/20 Hour 2	P&T Dr. Rivers, Pharm.D.

10/23-25 50 minutes	GU Exam (Exam Soft opens: 10/23 at 12:05 pm- closes: 10/25 at 5:00 pm)
	Week 6
10/29/20 Hour 1	GI: Liver disease and pathophysiology Pereira/Langworthy Assignments Read Applied Therapeutics, Chapter 25
10/29/20 Hour 2	GI: Liver disease and pathophysiology Pereira Assignments <ul style="list-style-type: none"> • Read Applied Therapeutics, Chapter 25
10/30/20 Hour 1	GI: Drug Induced Liver Disease TBL (iRAT/tRAT) Pereira/Langworthy Assignments Read Applied Therapeutics, Chapter 25 Watch DILD presentation
10/30/20 Hour 2	GI: Drug Induced Liver Disease TBL (iRAT/tRAT) Pereira/Langworthy
	Week 7
11/05/20 Hour 1	GI: Vomiting, Constipation in Geriatrics Swanoski Assignments Download from PubMed and read: Flake, Zachary A., et. al., Practical Selection of Antiemetics in the Ambulatory Setting. <i>American Family Physician</i> . 2015 . Mar 1, Pgs. 293-296.
11/05/20 Hour 2	GI: Irritable Bowel Syndrome Pereira Assignments GI Quiz on Canvas Opens 11/5 at 12:05 Closes 11/7 at 5:00 pm
11/06/20 Hour 1	GI: Pancreatitis TBL (iRAT/tRAT) Langworthy/Pereira Assignments Read Applied Therapeutics, Chapter 25 Watch Intro to pancreatitis presentation

11/06/20 Hour 2	GI: Pancreatitis TBL (iRAT/tRAT) Langworthy/Pereira
Week 8	
11/12/20 Hour 1	Specialty Pharmacy Services Beth Hager, Pharm.D. (asynchronous recording) Essentia Specialty Pharmacy Services (recorded and delivered asynchronously)
11/12/20 Hour 2	Specialty Pharmacy Services Beth Hager, Pharm.D.(asynchronous recording) Essentia Specialty Pharmacy Services (recorded and delivered asynchronously)
11/13/20 Hour 1	GI: Ulcerative Colitis & Crohn's Disease TBL (iRAT/tRAT) Pereira/Langworthy Assignments <ul style="list-style-type: none"> • Read Applied Therapeutics, Chapter 24 • Explore http://campaigns.gastro.org/algorithms/IBDCarePathway/#a Explore http://campaigns.gastro.org/algorithms/UlcerativeColitis/
11/13/20 Hour 2	GI: Ulcerative Colitis & Crohn's Disease TBL (iRAT/tRAT) Pereira/Langworthy
Week 9	
11/19/20 Hour 1	Arthritis/Gout: Pathophysiology of Osteoarthritis, Rheumatoid Arthritis & Gout Dr. Swanoski Assignments <ul style="list-style-type: none"> • Read Applied Therapeutics "Pathophysiology" components of each of the following 4 chapters Chapter 43: Osteoarthritis Chapter 44: Rheumatoid Arthritis Chapter 45: Gout and Hyperuricemia Chapter 33: Systemic Lupus Erythematosus

11/19/20 Hour 2	Arthritis/Gout: Pathophysiology of Osteoarthritis, Rheumatoid Arthritis & Gout Dr. Swanoski Assignments <ul style="list-style-type: none"> Read Applied Therapeutics “Pathophysiology” components of each chapter: Chapter 43: Osteoarthritis Chapter 44: Rheumatoid Arthritis Chapter 45: Gout and Hyperuricemia Chapter 33: Systemic Lupus Erythematosus
11/20/20 Hour 1	Arthritis/Gout: Osteoarthritis Dr. Swanoski Assignments <ul style="list-style-type: none"> Applied Therapeutics Chapter 43: Osteoarthritis
11/20/20 Hour 2	Arthritis/Gout: Osteoarthritis Dr. Swanoski Assignments <ul style="list-style-type: none"> Applied Therapeutics Chapter 43: Osteoarthritis
11/20/20	GI Exam (Exam Soft opens 11/20 at 12:05 pm- closes: 11/22 at 5:00 pm)
Week 10	
11/26-27/20	No Class Thanksgiving
Week 11	
12/03/20 Hour 1	Arthritis/Gout: Rheumatoid Arthritis & Lupus Dr. Lindsay Trocke Assignments <ul style="list-style-type: none"> Applied Therapeutics Chapter 44: Rheumatoid Arthritis Do not read/review Juvenile Idiopathic Arthritis (JIA) portion Applied Therapeutics Chapter 33: Systemic Lupus Erythematosus Quiz on Canvas Opens 12/3 at 12:05 Closes 12/5 at 5:00 pm
12/03/20 Hour 2	Arthritis/Gout: Rheumatoid Arthritis & Lupus Dr. Lindsay Trocke Assignments <ul style="list-style-type: none"> Applied Therapeutics Chapter 44: Rheumatoid Arthritis Do not read/review Juvenile Idiopathic Arthritis (JIA) portion Applied Therapeutics Chapter 33: Systemic Lupus Erythematosus

12/04/20 Hour 1	Arthritis/Gout: Gout Dr. Pereira Assignments <ul style="list-style-type: none"> • Applied Therapeutics Chapter 45: Gout and Hyperuricemia
Week 12	
12/10/20	Arthritis/Gout: Exam Opens 12/10 at 8 am and closes 12/12 at 5 pm